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Adela Mihai PETRE VALENTIN GHISOIU Yuma Hirakui Siraj Uddin Mu... Iella samereh

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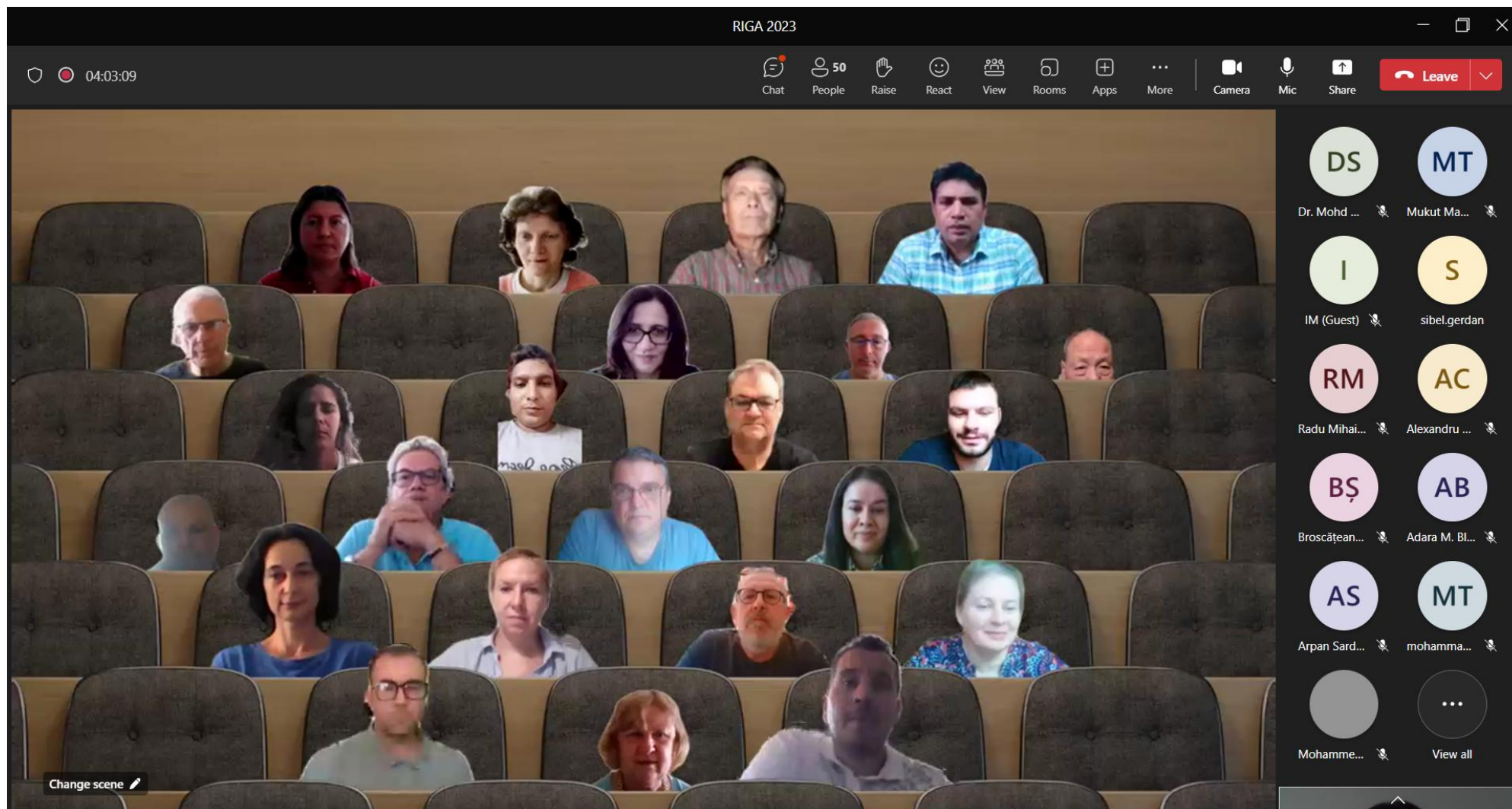
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Ion Mihai



ALFONSO ...



Ion Mierlus...



Ildefonso C...



Florin Balta...



DAVID PÉR...



Małgorzata...



Hilal Ayvaci...



View all



A key technical result 6/6

Thus,

$$\begin{aligned} \text{trace}_{\langle \cdot, \cdot \rangle}(T) &= n + \|a^\top(x)\|^4 + 2\|a^\top(x)\|^2 + \|a^N(x)\|^2 \|a^\top(x)\|^2 \\ &= n + \|a^\top(x)\|^2, \end{aligned}$$

where we have used $\|a^N\|^2 = -1 - \|a^\top\|^2$ everywhere on M^n .

Therefore, we have proved

$$\int_{v \in \mathbb{S}_a^{n+p-2}} \|\nabla \langle \psi_a, v \rangle\|^2(x) dV_a = \frac{n + \|a^\top(x)\|^2}{n + p - 1} \text{vol}(\mathbb{S}^{n+p-2}),$$

which ends the proof.



Alfonso Romero (Guest)
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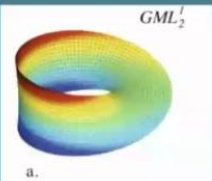
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GENERALIZED MÖBIUS-LISTING SURFACES AND BODIES



JOHAN GIELIS

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Veturia Chiroiu (Guest)

Johan Gielis (Guest)

Ryszard Deszcz (Guest)

LI

Ligia Munteanu IMSAR (Guest)

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Johan Gielis (Guest)

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3D BASED ON 2 CROSS SECTIONS

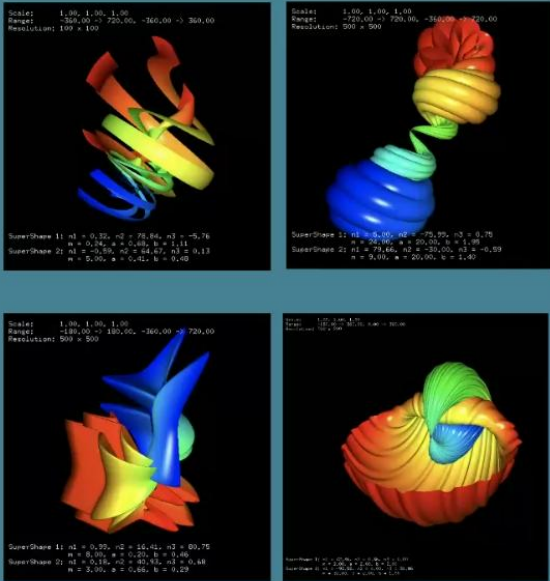


Surfaces,
Shells &
Volumes

Spherical

$$\begin{cases} x = \varrho_1(\vartheta) \cos \vartheta \cdot \varrho_2(\varphi) \cos \varphi \\ y = \varrho_1(\vartheta) \sin \vartheta \cdot \varrho_2(\varphi) \cos \varphi \\ z = \varrho_2(\varphi) \sin \varphi \end{cases}$$

Toroidal





Ion Mihai (Guest)



Johan Giellis (Guest)



Ryszard Deszcz (Guest)



Koji Matsumoto (Guest)

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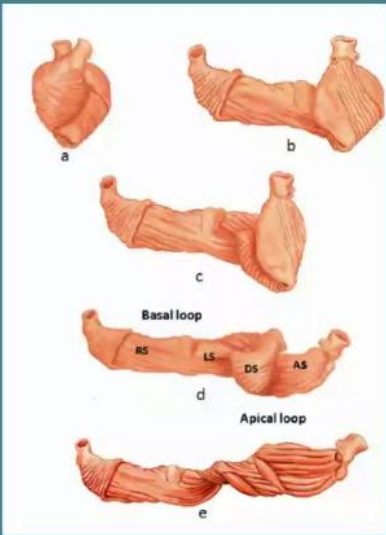
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THE HELICAL HEART OF F. TORRENT-GUASP

The motion is a helical twist rotation



(Rational) Gielis curve $m=1/2$ as base line

Koji Matsumoto (Guest)

Johan Gielis (Guest)

Ryszard Deszcz (Guest)

IM
Ion Mihai (Guest)

1/12

Johan Gielis (Guest)

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BACK TO BASIC TRIGONOMETRY

Figure 14: a. Radial (red, dotted+solid) and chordal (yellow) knives. b. Classical trigonometric functions

Koji Matsumoto (Guest)

Johan Giellis (Guest)

Ryszard Deszcz (Guest)

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Ion Mihai (Guest)

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Johan Giellis (Guest) - +

BACK TO BASIC TRIGONOMETRY

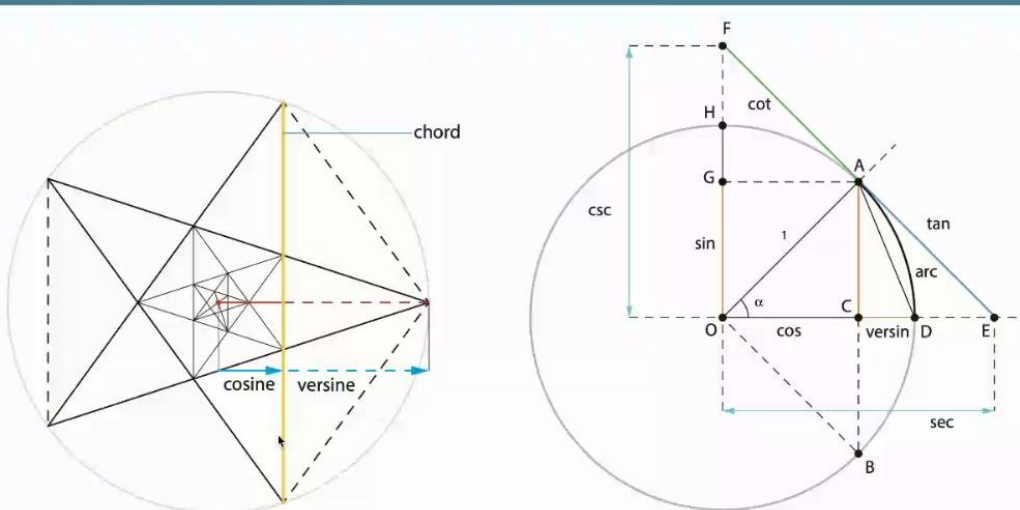


Figure 14: a. Radial (red, dotted+solid) and chordal (yellow) knives.
b. Classical trigonometric functions

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SU Siraj Uddin (Guest)
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SS Sivaguru Sritharan

VC Veturia Chiroiu (Guest)
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YH Yuma Hirakui (Guest)
Meeting guest

Transonic Aerodynamics Rigorous Analysis of Subsonic Exterior

**COMPRESSIBLE EULER AND MHD EQUATIONS
ON RIEMANNIAN MANIFOLDS
AND
ELLIPTIC-HYPERBOLIC PROPERTY
- A fundamental Problem in High Speed Delta-Wing
Aerodynamics**

Dr. S. S. Sritharan, National Academies/AFRL
U. S. A
provostsritharan@gmail.com
International Conference on Riemannian Geometry and
Applications – RIGA 2023, Bucharest, Romania

August 24, 2023

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Ryszard Deszcz (Guest)

Sivaguru Sriharan

KM

Koji Matsumoto (Guest)

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Transonic Aerodynamics Risorous Analysis of Subsonic Exterior

Boost-Glide Hypersonic Weapon

Falcon HTV-2 Flight Overview DARPA

The diagram illustrates the six phases of the Falcon HTV-2 flight profile:

- Launch Phase:** The Minuteman III launch vehicle launches HTV-2 to near orbital speeds.
- Reentry Orient:** HTV-2 separates and uses the Reaction Control System (RCS) to orient itself for reentry.
- Reentry Phase:** RCS and aerodynamic guide HTV-2 throughout reentry into the earth's upper atmosphere.
- Pull-Up Phase:** HTV-2 performs a pull-up maneuver to control speed and attitude for glide.
- Glide Phase:** HTV-2 performs maneuvers to test aerodynamic performance.
- Terminal Phase:** HTV-2 falls and dives into the ocean to terminate its flight.

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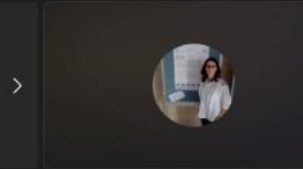
Ryszard Deszcz (Guest)



Sivaguru Sritharan



Petar Mladinic (Guest)



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-  Bejan Cornelia-Li... (Guest)
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-  Broscațeanu Ștef... (Guest)
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Transonic Aerodynamics: Rigorous Analysis of Subsonic Exterior

Compressible Inviscid MHD Equations Projected to a Unit Sphere: PDE is of Mixed type as shown by I. Holloway and S. S. Sritharan (2021)

$$\frac{\partial}{\partial \zeta^\beta} (\rho \sqrt{g} v^\beta) + 2\rho \sqrt{g} V^3 = 0, \quad \beta = 1, 2, \quad (5)$$

$$\left[\sqrt{g} \left(\rho v^\alpha v^\beta - \frac{1}{\mu} b^\alpha b^\beta + g^{\alpha\beta} \left[P + \frac{1}{2\mu} |B|^2 \right] \right) \right]_{||\beta}$$

$$+ 3 \left[\sqrt{g} \left(\rho v^\alpha V^3 - \frac{1}{\mu} b^\alpha B^3 \right) \right] = -\frac{1}{\mu} \sqrt{g} b^\alpha \left(b_{||\nu}^\nu + 2B^3 \right), \quad (6)$$

$$\frac{\partial}{\partial \zeta^\alpha} \left(\rho \sqrt{g} v^\alpha V^3 - \frac{1}{\mu} \sqrt{g} B^3 b^\alpha \right) + 2\sqrt{g} \left(\rho (V^3)^2 - \frac{1}{\mu} (B^3)^2 \right)$$

$$- \sqrt{g} \rho v_c^2 + \frac{1}{\mu} \sqrt{g} b_c^2 = -\frac{1}{\mu} \sqrt{g} B^3 \left(b_{||\nu}^\nu + 2B^3 \right), \quad (7)$$

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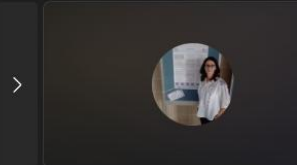
Koji Matsumoto (Guest)



Ryszard Deszcz (Guest)



Yuma Hirakui (Guest)



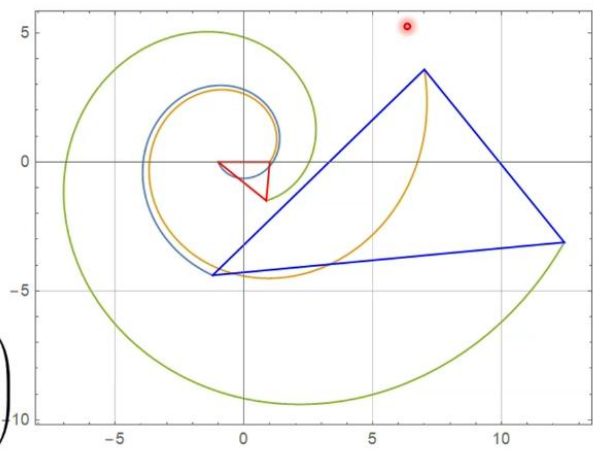
NUMERICAL EXAMPLE

Expansion

Condition

$$(\Gamma_1, \Gamma_2, \Gamma_3) = (40, 40, -20)$$

$$(s^1(0), s^2(0), s^3(0)) = \left(\sqrt{\left(1 - \frac{\sqrt{3}}{2}\right)^2 + \frac{9}{4}}, \sqrt{\left(1 + \frac{\sqrt{3}}{2}\right)^2 + \frac{9}{4}}, 2 \right)$$



Yuma Hirakui (Guest)

< In this meeting (38) Mute all X

- KM Koji Matsumoto (Guest)
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Meeting guest
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- LS leila samereh (Guest)
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- LD Leonard Daus
- LI Ligia Munteanu I... (Guest)
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- MG Małgorzata Głog... (Guest)
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Two spherical bodies in contact

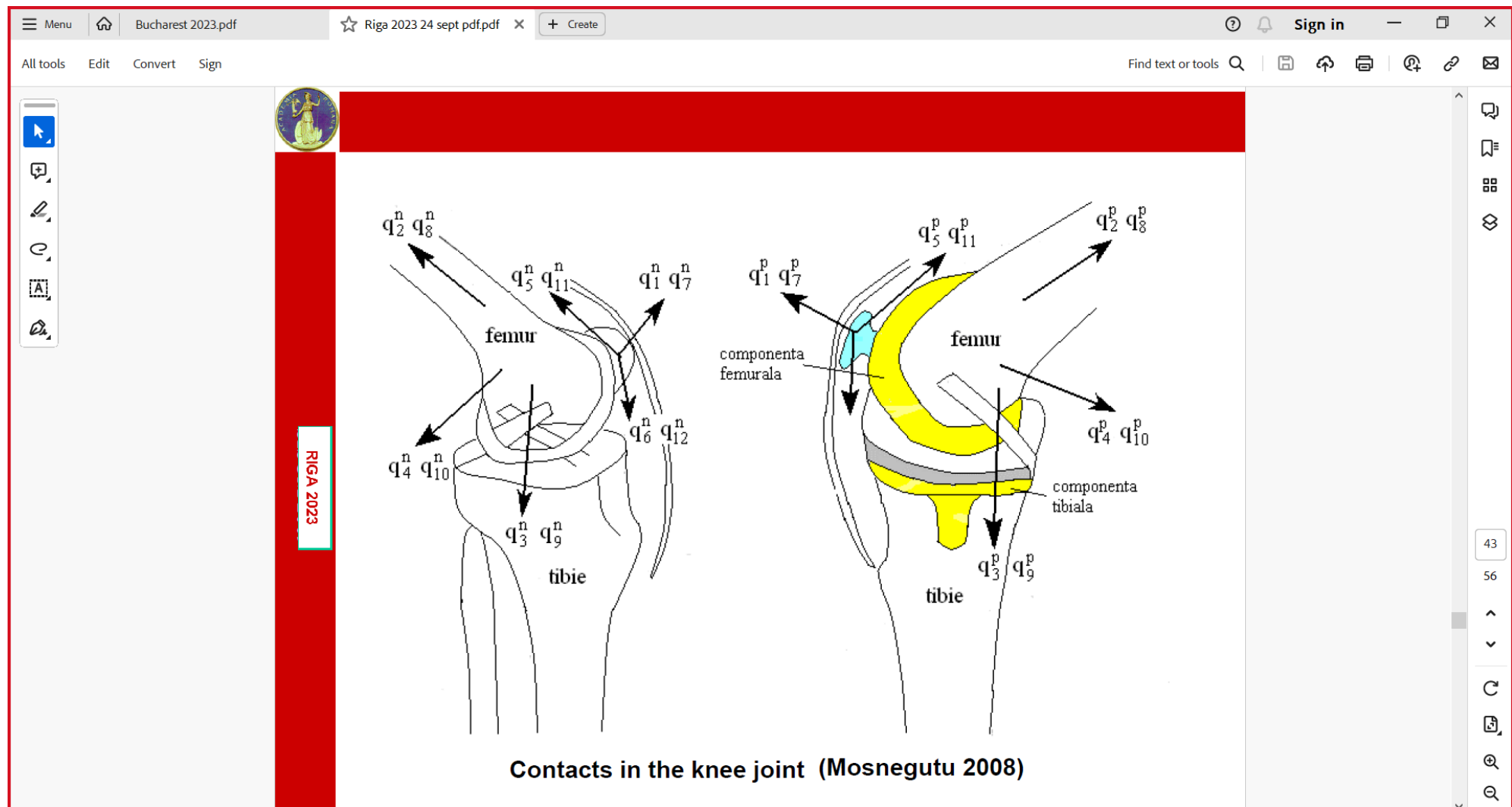
A) Detail for determining the gap function $g(r)$. B) The case of outer contact ($R_1 > 0$ and $R_2 > 0$). C) The case of contact between a sphere and a plane ($R_1 > 0$ and $R_2 = \infty$). D) The case of inner contact ($R_1 > 0$ and $-R_2 < 0$).

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RAKESH K...

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Preliminaries

Isotropic spacelike submanifolds in pseudo-Riemannian space form
Isotropic timelike submanifolds in pseudo-Riemannian space form
Isotropic Lorentzian submanifold of pseudo-Riemannian space form
Examples
References

Preliminaries

One of the most important part of Differential Geometry is represented by the pseudo-Riemannian geometry.

The notion of an *isotropic immersion* was introduced by B. O'Neill in

B. O'Neill, *Semi-Riemannian Geometry. With Applications to Relativity*, Acad. Press, New York, 1983

as an isometric immersion such that all its normal curvature vectors have the same length.

Alexandru Cosmin Ciobanu

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Isotropic Submanifolds

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Preliminaries
A Ricci Inequality

Chen Inequalities
References

Proof:

- $$3A_{h(X,Y)}Z = \lambda[g(X,Y)Z + g(Y,Z)X + g(X,Z)Y + R(Z,X)Y - (\tilde{R}(Z,X)Y)^t + R(Z,Y)X - (\tilde{R}(Z,Y)X)^t] \quad [1]$$
- $$3g(A_{h(X,Y)}Z, W) = \lambda[g(X,Y)g(Z,W) + g(Y,Z)g(X,W) + g(X,Z)g(Y,W)] + g(R(Z,X)Y, W) - g(\tilde{R}(Z,X)Y, W) + g(R(Z,Y)X, W) - g(\tilde{R}(Z,Y)X, W)$$

Setting $W = X, Z = Y \implies$

- $$3g(h(X,Y), h(X,Y)) = \lambda[g(X,Y)g(X,Y) + g(Y,Y)g(X,X) + g(X,Y)g(Y,X)] + g(R(Y,X)Y, X) - g(\tilde{R}(Y,X)Y, X) + g(R(Y,Y)X, X) - g(\tilde{R}(Y,Y)X, X)$$
- This implies $3g(h(X,Y), h(X,Y)) = \lambda + c - k(\pi)$. Therefore $k(\pi) + 3g(h(X,Y), h(X,Y)) = \lambda + c$.
- As M_0^n is a (maximal) spacelike submanifold of $\tilde{M}_s^{n+s}(c)$, this means $g(h(X,Y), h(X,Y)) \leq 0$. Hence $k(\pi) \geq \lambda + c$.



Koji Matsumoto (Guest)



Marius Mirea

RK

RAKESH K...

...

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Marius Mirea
+
UTCB, September 24, 2023
Isotropic Spacelike Submanifolds

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Preliminaries
A Ricci Inequality
Chen Inequalities
References

We split the proof into three cases.

Case 1. Let $\pi \subset T_p M^n$, $\pi = \text{span}\{e_1, u\}$, with $u \in \text{span}\{e_2, \dots, e_n\}$. We may assume $\pi = \text{span}\{e_1, e_2\}$. Then:

$$\begin{aligned}
 K(e_1 \wedge e_2) &= \langle h(e_1, e_1), h(e_2, e_2) \rangle - \langle h(e_1, e_2), h(e_1, e_2) \rangle \\
 &= \langle aJe_1, -aJe_1 \rangle - \langle -aJe_2, -aJe_2 \rangle \\
 &= -a^2 - a^2 = -2a^2.
 \end{aligned}$$

Case 2. Let $U = \text{span}\{e_2, \dots, e_n\}$ and $\pi \subset U$ be a plane section. We may assume $\pi = \text{span}\{e_2, e_3\}$. Then:

$$\begin{aligned}
 K(e_2 \wedge e_3) &= \langle h(e_2, e_2), h(e_3, e_3) \rangle - \langle h(e_2, e_3), h(e_2, e_3) \rangle \\
 &= \langle -aJe_1, -aJe_1 \rangle - \langle 0, 0 \rangle = a^2.
 \end{aligned}$$



Marius Mirea



Koji Matsumoto (Guest)



RAKESH KUMAR (Guest)



Alexandru Cosmin Ciobanu

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Marius Mirea
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Isotropic Spacelike Submanifolds

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Layth M. Alabdulsada (Guest)

PG

PETRE VALENTIN GHISOIU

MM

Mohammed Mohammed (218...

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Divergence. Riemannian metric

A divergence represents a degree of separation of two points P and Q , but it is not a distance. It does not necessarily satisfy the symmetry condition, nor the triangle inequality. When points P and Q are sufficiently close, we define the square of an infinitesimal distance ds between them by rewriting (4) as

$$ds^2 = 2D[\xi_P : \xi_P + d\xi] = \sum g_{ij}(\xi_P) d\xi_i d\xi_j. \quad (5)$$

A manifold M is said to be *Riemannian* when a positive definite matrix $G(\xi)$ is defined on M and the square of the local distance between two nearby points is given by (5). A divergence D provides M with a Riemannian structure.

Ioana Radulescu

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- Firstly, if we differentiate $g(T, T) = 0$ with respect to $\tilde{\nabla}$, since it is a metric connection, we find $g(\tilde{\nabla}_T T, T) = 0$. So $\tilde{\nabla}_T T \perp T$.

Definition

Let
$$\tilde{\kappa} = \|\tilde{\nabla}_T T\| = \sqrt{g(\tilde{\nabla}_T T, \tilde{\nabla}_T T)}.$$
We call $\tilde{\kappa}$ as *semi-symmetric curvature of γ* . If $\tilde{\kappa} = 0$ (i.e. $\tilde{\nabla}_T T = 0$), then γ is called a *semi-symmetric geodesic*. Semi-symmetric geodesics are called *semi-symmetric Frenet curves of order 1*.

RK

Rakesh Ku...

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Şaban Güvenç

Ş. Güvenç (Balıkesir University)

Semi-Symmetric Frenet Curves

September 24, 2023

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- IM Ion Mihai (Guest)
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- JV Joeri Van der Veken (Guest)
- JJ JUAN DE DIOS PÉREZ JIMÉNEZ
- KM Koji Matsumoto (Guest)
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- LS Ieila samereh (Guest)
Meeting guest
- LI Ligia Munteanu I... (Guest)
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- MA M. Evren Aydin (Guest)
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- MM Marian Ioan Mu... (Guest)
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- MM Marius Mirea
- MP Milos Petrovic
- MA Miroslava Antic (Guest)
Meeting guest

The moving frame for hypersurfaces in $S^6(1)$

- Now we will present one of the convenient moving frames to work with, for details see [Desmukh(2008)].
- For an arbitrary unit vector field $E_1 \in \mathcal{D}$, let $E_2 = JE_1$. From the definition of J , E_2 is obviously orthogonal to E_1 and since J is an isometry, we have that E_2 is also a unit vector.
- Next, let $E_3 = G(E_1, \xi)$ and $E_4 = JE_3$. From (2) we have

$$E_3 = G(E_1, \xi) = E_1 \times \xi + g(E_1, J\xi)p = E_1 \times \xi, \quad (6)$$

so $E_3 \in \mathcal{D}$. Also, using (3) and (5) we get

$$\|E_3\|^2 = g(G(E_1, \xi), G(E_1, \xi)) = -g(\xi, G(E_1, G(E_1, \xi))) = 1,$$

so E_3 and E_4 are unit vectors.

Djordje Kocić (Guest)

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§1. Trans-Sasakian Manifolds

Definition 1.1 An almost contact metric manifold M with structure (φ, ξ, η, g) is said to be a *trans-Sasakian manifold* of (α, β) -type if it satisfies

$$(1.1) \quad (\nabla_X \varphi)Y = \alpha\{g(X, Y)\xi - \eta(Y)X\} + \beta\{g(\varphi X, Y)\xi - \eta(Y)\varphi X\}$$

for certain functions on M α and β which are called *associated functions*, where ∇ means the covariant derivative of g .

Formulae in a trans-Sasakian manifold

I. Structure vector fields ξ and η .

I-1. $\nabla_X \xi = -\alpha\varphi X + \beta\{X - \eta(X)\xi\}.$

I-2. $(\nabla_Y \eta)(X) = -\alpha g(\varphi Y, X) + \beta\{g(Y, X) - \eta(Y)\eta(X)\}.$

II. Riemannian curvature tensor R .

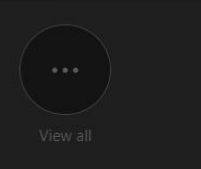
II-1. $R(X, Y, Z, \xi) = (X\alpha)g(\varphi Y, Z) - (Y\alpha)g(\varphi X, Z)$

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

14:59

Take control Pop out Chat People Raise React View Rooms Apps More Camera Mic Share Leave



IM

Ion Mihai (...)

View all

Participants

Type a name

Share invite

In this meeting (24)

Mute all

Adela Mihai

Organizer

AB

Adara M. Blaga (Guest)

Meeting guest

AC

Alexandru Cosmin Ciobanu

AN

Ana Irina Nistor

ÇÇ

Çağınhan Çimen

DK

Djordje Kocić (Guest)

Meeting guest

DÄ

Dr. Figula Ágota

DD

Dr. Krishnendu De (Guest)

Meeting guest

IC

Ildefonso Castro (Guest)

Meeting guest

IM

Ion Mihai (Guest)

Meeting guest

JV

Joeri Van der Veken

1 – Minimal Lagrangian surfaces in $S^2 \times S^2$

We recall some results from [Castro & Urbano, 2007].

Complex structure on the unit sphere S^2 :

$$J_p^{S^2} v = p \times v$$

Complex structure on the Riemannian product of unit spheres $S^2 \times S^2$:

$$J_{(p_1, p_2)}(v_1, v_2) = (J_{p_1}^{S^2} v_1, J_{p_2}^{S^2} v_2)$$

Joeri Van der Veken

KU LEUVEN

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023
01:02:48

Take control
Pop out
Chat
People
Raise
React
View
Rooms
Apps
More

Camera
Mic
Share
Leave



JJ

LD

...

JUAN DE D...
Leonard D...
View all



In this meeting (35)
Mute all

- LS

leila samereh (Guest)
Meeting guest

🔊
- LD

Leonard Daus

🔊
- MA

M. Evren Aydin (Guest)
Meeting guest

🔊
- MG

Małgorzata Głogowska

🔊
- MM

Marian Ioan Mu... (Guest)
Meeting guest

🔊
- MM

Marius Mirea (Guest)
Meeting guest

🔊
- MP

Milos Petrovic

🔊
- MA

Miroslava Antic (Guest)
Meeting guest

🔊
- MT

Moctar Traore (Guest)
Meeting guest

🔊
- MT

mohammad khal... (Guest)
Meeting guest

🔊
- PG

PETRE VALENTIN GHISOIU

🔊
- RD

Ryszard Deszcz (Guest)
Meeting guest

🔊
- ŞG

Şaban Güvenç

🔊
- ŞM

Şemsi Eken Meri... (Guest)

🔊

Lezing Boekarest (24-09-2023) ONLINE.pdf - Adobe Acrobat Reader DC (32-bit)
File Edit View Sign Window Help

Home Tools
Lezing Boekarest (2... x)

16 (53 of 114)
192%

3 – The Gauss map of a hypersurface of a sphere

Proposition

If a hypersurface $a : M^n \rightarrow S^{n+1}(1)$ has **constant principal curvatures**, then its Gauss map $G : M^n \rightarrow Q^n$ is a **minimal Lagrangian immersion**.

The statement follows from the following formula from [Palmer, 1997]:

$$g(JH, \cdot) = -\frac{1}{n} d \left(\operatorname{Im} \left(\log \prod_{j=1}^n (1 + i\lambda_j) \right) \right).$$

Minimal Lagrangian submanifolds of Q^n are thus related to isoparametric hypersurfaces of spheres.

KU LEUVEN

Joeri Van der Veken

–
+

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

The screenshot shows a Zoom meeting window titled "RIGA 2023". The top toolbar includes icons for Pop out, Chat, People (37), Raise, React, View, Rooms, Apps, More, Camera, Mic, Share, and a red "Leave" button. The time 08:25:13 is displayed. Below the toolbar, there are video thumbnails for participants: Derdzinski, And... (AD), Dipankar H... (DH), and a "View all" button. The main content area displays a presentation slide titled "THE OLSZAK DISTRIBUTION". The slide text reads: "Given an ECS manifold (M, g) , we define its *rank* to be the dimension $d \in \{1, 2\}$ of its *Olszak distribution* $\mathcal{D}$, which is a null parallel distribution on M [Olszak, 1993]. The sections of $\mathcal{D}$ are the vector fields v such that $g(v, \cdot) \wedge [W(v', v'', \cdot, \cdot)] = 0$ for all vector fields v', v'' . Lorentzian ECS manifolds have rank one: the Lorentz signature limits the dimensions of null distributions to at most 1." The slide footer shows the URL "https://people.math.osu.edu/derdzinski.1/beamer/RIGA2023.pdf" and the page number "p. 2". The bottom status bar indicates the current speaker is "Derdzinski, Andrzej" and the topic is "Compact Weyl-parallel manifolds". On the right side, the "Device settings" panel is open, showing options for Speaker (Speakers (Realtek(R) Audio)), Microphone (Microphone (Realtek(R) Audio)), Spatial audio (toggle off), Noise suppression (toggle off), Video Settings (Camera: Integrated Camera, Mirror my video: toggle on, Adjust brightness: toggle off).

RIGA 2023

08:25:13

Pop out Chat People 37 Raise React View Rooms Apps More Camera Mic Share Leave

AD DH ...

Derdzinski, And... Dipankar H... View all

THE OLSZAK DISTRIBUTION

Given an ECS manifold (M, g) , we define its *rank* to be the dimension $d \in \{1, 2\}$ of its *Olszak distribution* $\mathcal{D}$, which is a null parallel distribution on M [Olszak, 1993].

The sections of $\mathcal{D}$ are the vector fields v such that $g(v, \cdot) \wedge [W(v', v'', \cdot, \cdot)] = 0$ for all vector fields v', v'' .

Lorentzian ECS manifolds have rank one: the Lorentz signature limits the dimensions of null distributions to at most 1.

<https://people.math.osu.edu/derdzinski.1/beamer/RIGA2023.pdf> p. 2

Derdzinski, Andrzej

Andrzej Derdzinski Compact Weyl-parallel manifolds

Device settings

Speaker

Speakers (Realtek(R) Audio)

Microphone

Microphone (Realtek(R) Audio)

Spatial audio ⓘ

More natural, immersive sound. [Learn more](#)

Noise suppression ⓘ

Choose Low if you want others to hear music. [Learn more](#)

Auto (default)

Video Settings

Camera

Integrated Camera

Mirror my video ⓘ

Adjust brightness ⓘ

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

04:04:20

Chat People Raise React View Rooms Apps More

Camera Mic Share Leave

MT S CÖ MP BC I IC KM DH ...

Mukut Ma... sibel.gerdan Cihan Özgür Milos Petro... Bejan Cornelia... IM (Guest) Ildefonso C... Koji Matsu... Dipankar H... View all

Turn camera off (Ctrl+Shift+O) side your org. It's possible they have message-related policies that will apply to the chat. [Learn more](#)

Meeting chat

Recording
Adela Mihai
3h 15m 53s

This recording is set to expire. View or change the expiration date [here](#).
[Learn more](#)

12:26 PM

and a pdf with previous RIGA conferences is there

[PowerPoint Presentation \(utcb.ro\)](#)

Last read

Dr. Mohd Danish Siddiqi (Guest) 12:42 PM

DS Nice presentation.

sibel.gerdan 12:43 PM

S thank you professor siddiqi

Type a message...

🔗 📌 😊 📺 🗨️ ➡

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

04:03:31

Chat 50 People Raise React View Rooms Apps More Camera Mic Share Leave

Participants (from top-left to bottom-right):

- mcasm
- Johan Gielis
- M. Evren Aydin
- Wei, Shihshu Walter
- Carretero, Paula
- Dr. Figula Ágota
- Andreea Olteanu
- JUAN DE DIOS PÉREZ JIMÉNEZ
- Djordje Kocić
- Adela Mihai
- Cihan Özgür
- Simona Marinescu
- Marius Mirea
- Nihal Özgür
- Siraj Uddin
- Bejan Cornelia-Livia
- Malgorzata Glogowska
- Milos Petrovic
- Mohammed Mohammed...
- Dr. Y...
- Ryszard Deszcz
- Mactar Traore
- Miroslava Antic
- Koji Matsumoto
- sibel.gerdan
- Ildefonso Castro
- PETRE VALENTIN GHISOIU
- IM

Participant List (from top-left to bottom-right):

- DS (Dr. Mohd ...)
- MT (Mukut Ma...)
- S (sibel.gerdan)
- CÖ (Cihan Özgür)
- MP (Milos Petro...)
- BC (Bejan Corn...)
- I (IM (Guest))
- IC (Ildefonso C...)
- KM (Koji Matsu...)
- SC (SIMONA VI...)
- DH (Dipankar H...)
- View all

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

04:02:51

Chat People 50 Raise React View Rooms Apps More Camera Mic Share Leave

Koji Matsumoto (Guest)

sibel.gerdan

PETRE VALENTIN GHISOIU

Ildefonso Castro (Guest)

Cihan Özgür

Dr. Figula Ágota

Simona Marinescu

Johan Gielis

Dr. Krishnendu De (Guest)

Siraj Uddin (Guest)

DS Dr. Mohd ...

MP Milos Petro...

BC Bejan Corn...

MT Mukut Ma...

I IM (Guest)

PC Carretero, ...

AO Andreea OL...

MA Miroslava ...

SR Simona Lui...

View all

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

04:02:38

Chat People 50 Raise React View Rooms Apps More Camera Mic Share Leave

Koji Matsumoto (Guest)

sibel.gerdan

PETRE VALENTIN GHISOIU

Ildelfonso Castro (Guest)

Cihan Özgür

Dr. Figula Ágota

Simona Marinescu

Johan Gielis

Dr. Krishnendu De (Guest)

DS Dr. Mohd ...

MP Milos Petro...

BC Bejan Corn...

MT Mukut Ma...

I IM (Guest)

PC Carretero, ...

AO Andreea OL...

MA Miroslava ...

SR Simona Lui...

View all

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

01:47:09

Take controlPop outChatPeople47RaiseReactViewRoomsAppsMoreCameraMicShareLeave

A geometric characterization of the quadric surfaces of revolution

PAULA CARRETERO AND ILDEFONSO CASTRO

Universidad de Jaén

Supported by Project PID2020-117868GB-I00 financed by MCIN/ AEI/10.13039/501100011033/



-RIGA 2023- September 23rd



MA

M. Eyr...

View all



Ildefonso Castro (Guest)

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023
02:04:22

Take control Pop out Chat People 46 Raise React View Rooms Apps More
Camera Mic Share
Leave

M. Evren A...

View all

< In this meeting (46) Mute all X

Non-degenerated quadric surfaces of revolution

- **Elipsoid of revolution, $\mathcal{E}_{a,b}$**
 $\frac{x^2+y^2}{a^2} + \frac{z^2}{b^2} = 1, k_m = \frac{a^4}{b^2} k_p^3$
 $\mathcal{K}(x) = \frac{bx}{\sqrt{a^4 - (a^2 + b^2)x^2}}$
- **1-sheet hyperboloid of revol., $\mathcal{H}_{a,b}^1$**
 $\frac{x^2+y^2}{a^2} - \frac{z^2}{b^2} = 1, k_m = -\frac{a^4}{b^2} k_p^3$
 $\mathcal{K}(x) = \frac{bx}{\sqrt{(a^2 + b^2)x^2 - a^4}}$

- **2-sheets hyperboloid of revol., $\mathcal{H}_{a,b}^2$**
 $-\frac{x^2+y^2}{a^2} + \frac{z^2}{b^2} = 1, k_m = \frac{a^4}{b^2} k_p^3$
 $\mathcal{K}(x) = \frac{bx}{\sqrt{a^4 + (a^2 + b^2)x^2}}$
- **Paraboloid of revolution, $\mathcal{P}_a$**
 $z = \frac{x^2+y^2}{2a}, k_m = a^2 k_p^3$
 $\mathcal{K}(x) = \frac{x}{\sqrt{a^2 + x^2}}$

- Meeting guest
- Djordje Kocić (Guest)
Meeting guest
- Dr. Figula Ágota
- Dr. Krishnendu De (Guest)
Meeting guest
- Dr. Mohd Danish... (Guest)
Meeting guest
- Ildefonso Castro (Guest)
Meeting guest
- IM (Guest)
Meeting guest
- Ioana Lazarescu (Guest)
Meeting guest
- JUAN DE DIOS PÉREZ JIMÉNEZ
- Koji Matsumoto (Guest)
Meeting guest
- Layth M. Alabdul... (Guest)
Meeting guest
- M. Evren Aydın (Guest)
Meeting guest
- Małgorzata Głogowska
- Marian Ioan Mu... (Guest)
Meeting guest

Ildefonso Castro (Guest)
— +

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

01:44:13

Chat People Raise React View Rooms Apps More Camera Mic Share Leave

Turn camera on (Ctrl+Shift+O)

BC MA
Bejan Corn... Miroslava ...
1 T JJ
tramoct@g... JUAN DE D...
MT DS
Mukut Ma... Dr. Mohd ...
PC NV
Carretero, ... Nicoleta Vo...
BS ...
BAYRAM S... View all

Marian Ioan Munteanu (Guest)

Koji Matsumoto (Guest)

Ildefonso Castro (Guest)

M. Evren Aydin (Guest)

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

Microsoft Teams Classic interface showing a meeting titled "RIGA 2023". The meeting is in progress, with a timer showing 01:43:37. The interface includes a top bar with navigation icons (Pop out, Chat, People, Raise, React, View, Rooms, Apps, More) and a bottom bar with icons for Camera, Mic, Share, and a red "Leave" button.

The main view displays a grid of participants. On the left, a large video feed shows a group of people in a virtual meeting room. On the right, a "Participants" list shows 45 people in the meeting. The list includes names and roles, such as "tramoct@gmail... (Guest) Meeting guest", "Adela Mihai Organizer", "Adara M. Blaga (Guest) Meeting guest", "Alexandru Cosmin Ciobanu", "Alfonso Romero (Guest) Meeting guest", "Andreea Olteanu", "Arpan Sardar (Guest) Meeting guest", "BAYRAM SAHIN", "Bejan Cornelia-Li... (Guest) Meeting guest", and "Broscațeanu Ștef... (Guest) Meeting guest".

The bottom right panel shows a "Katılmalar" (Attendees) list with icons for each participant, including "MM", "KM", "MT", "MA", "BC", and "BS".

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

Microsoft Teams Classic interface showing a virtual meeting for RIGA 2023. The meeting title is "RIGA 2023". The interface includes a top navigation bar with icons for Pop out, Chat, People (41), Raise, React, View, Rooms, Apps, More, Camera, Mic, Share, and a Leave button. The main content area displays a large video feed of participants, a list of participants on the right, and a chat window at the bottom. The participants list shows 41 attendees, including Marian Ioan Mu..., Adela Mihai, Koji Matsu..., Mukut Ma..., T, MA, tramoct@g..., Miroslava ..., IUAN DE..., Bejan Corn..., and Andreea OL... The chat window shows a message from teams.microsoft.com: "ekranınızı paylaşıyor." with buttons for "Paylaşmayı durdur" and "Gizle".

01:21:47

01:07:11

RIGA-2023.pdf - Adobe Acrobat Reader (64-bit)

teams.microsoft.com ekranınızı paylaşıyor. Paylaşmayı durdur Gizle

Katılımcılar

Bu toplantıda (41) Tümünün sesini kapat

- MA M. Evren Aydın (Konuk) Toplantı konuğu
- AB Adara M. Blaga (... (Konuk) Toplantı konuğu
- Adela Mihai Düzenleyici
- Alexandru Cosmin Ciobanu
- AR Alfonso Romero (Konuk) Toplantı konuğu
- Andreea Olteanu
- AS Arpan Sardar (Konuk) Toplantı konuğu
- BAYRAM SAHİN
- BC Bejan Cornelia-Li... (Konuk) Toplantı konuğu
- BS Broscăteanu Ștef... (Konuk) Toplantı konuğu

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

01:20:53

Chat People Raise React View Rooms Apps More Camera Mic Share Leave

Marian Ioan Munteanu (Guest)

Koji Matsumoto (Guest)

Simona Marinescu

Cihan Özgür

M. Evren Aydın (Guest)

T tramoct@g... Bejan Corn...
MA Miroslava ... JJ JUAN DE D...
MT Mukut Ma... ŞG Şaban Guv...
AO Andreea OL... S sibel.gerdan
SW Shihshu W... View all

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

01:17:33

Pop out Chat People Raise React View Rooms Apps More Camera Mic Share Leave

Dosyalar 12:56 23 Eylül Cmt

Bir kullanıcı kaydetmeye başladı. Gizlilik ilkesi

Marian M. (Konuk)

Koji M. (Konuk)

Cihan O.

MT

Mukut M. (Konuk)

T

tramoct@gmail.com (Konuk)

Ryszard D. (Konuk)

Adela M.

Bejan C. (Konuk)

Sunuyu durdur

Ses

Simona M.

BS

BAYRAM SAHIN

View all

IC BŞ ÇÇ MG DK MA MP JJ MA

Idelfonso C. (...)

BroscaŃeanu Ş...

Çağrıhan Ç.

Małgorzata G.

Djordje K. (Ko...

M. Evren Aydi...

Milos P.

JUAN D.

Miroslava A. (...)

BAYRAM SAHIN

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

01:16:53

Pop out Chat People 40 Raise React View Rooms Apps More Camera Mic Share Leave

You've changed the scene for everyone. X

Mukut Mani Tripathi (Guest)
Dear Professor Sahin, Thank you for your nice talk. Generic submersion is the...

Participants

Type a name

Share invite

In this meeting (40) Mute all

- Adela Mihai Organizer
- AB Adara M. Blaga (Guest) Meeting guest
- AC Alexandru Cosmin Ciobanu
- AR Alfonso Romero (Guest) Meeting guest
- AO Andreea Olteanu
- AS Arpan Sardar (Guest) Meeting guest
- BS BAYRAM SAHIN**
- BC Bejan Cornelia-Li... (Guest) Meeting guest
- BŞ Broscăţeanu Ştef... (Guest) Meeting guest
- ÇÇ Çağrıhan Çimen
- CÖ Cihan Özgür

Change scene

Dear Professor Sahin, Thank you f...

BAYRAM SAHIN

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

01:16:20

Pop out Chat People 40 Raise React View Rooms Apps More

Camera Mic Share Leave

Some people in this chat are outside your org. It's possible they have message-related policies that will apply to the chat. [Learn more](#)

Meeting chat

8:42 AM Meeting ended: 20m 37s [View recap](#)

[Attendance](#) [Download](#)

8:42 AM Meeting started

8:42 AM Recording has started

8:42 AM Recording has stopped. Saving recording...

Recording
Adela Mihai
9s

This recording is set to expire. [View or change the expiration date here.](#) [Learn more](#)

8:45 AM Good Morning.

9:03 AM Recording has started

Type a message...

BAYRAM SAHIN

BS BAYRAM SAHIN

MT Mukut M. (Konuk)

T tramoct@gmail.com (Konuk)

MP Milos P.

MA Miroslava A. (Konuk)

MA Adela M.

MA M. Evren Aydi...

DA Dr. Figula Agota

AB Adara B. (Konuk)

DD Dr. Krishnend...

IC Ildefonso C. (K...

BS Broscăteanu S...

CC Çağrıhan Ç.

MG Malgorzata G.

DK Djordje K. (Ko...

MA M. Evren Aydi...

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

31:41

Pop out Chat People 29 Raise React View Rooms Apps More Camera Mic Share Leave

BS BAYRAM SAHIN T tramoct@g... View all

Lightlike Submersions-Kupeli's Approach

A generalization of semi-Riemannian submersions allowing lightlike (degenerate) submanifolds as fibres was given by D. N. Kupeli and a fundamental equation of a regular semi-Riemannian submersion was obtained. Let M_1 and M_2 be semi-Riemannian manifolds with metric tensors g_1 and g_2 , respectively and $f : M_1 \rightarrow M_2$ a smooth map. Also let for each $p_1 \in M_1$, $p_2 = f(p_1)$. Now set

AM

BAYRAM SAHIN

Bayram Şahin Lightlike Submersions 11 / 56

In this meeting (29) Mute all

- Adela Mihai Organizer
- AB Adara M. Blaga (Guest) Meeting guest
- AO Andreea Olteanu
- AS Arpan Sardar (Guest) Meeting guest
- BS BAYRAM SAHIN
- BC Bejan Cornelia-Li... (Guest) Meeting guest
- BS Broscăţeanu Ştef... (Guest) Meeting guest
- ÇÇ Çağrıhan Çimen
- CÖ Cihan Özgür
- DK Djordje Kocić (Guest) Meeting guest
- DÁ Dr. Figula Ágota
- DD Dr. Krishnendu De (Guest) Meeting guest
- GG Garima Gupta (Guest) Meeting guest

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

09:59:04

Chat People Raise React View Rooms Apps More Camera Mic Share Leave

B. Y. Chen (Guest)

Ildefonso Castro (Guest)

Gabriel Macsim (Guest)

Koji Matsumoto (Guest)

AN Ana Irina N... VM VERONICA ...

DL DAVID PÉR... SE Stanislaw E...

MP Milos Petro... S sibel.gerdan

PG PETRE VAL... DU Deniz Ulusoy

HT Hakan Met... View all

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

09:58:49

Chat People Raise React View Rooms Apps More Camera Mic Share Leave

DAVID PÉREZ LÓPEZ

B. Y. Chen (Guest)

Gabriel Macsim (Guest)

Koji Matsumoto (Guest)

Ildefonso Castro (Guest)

Simona Marinescu

IM (Guest)

Alfonso Romero (Guest)

Dr. Figula Ágota

AN Ana Irina N... VM VERONICA ... JJ JUAN DE DIOS ... LA Layth M. AL... OP Oscar Palm... DH Dipankar H... PC Carretero, ... MM Mohamme... MP Milos Petro... View all

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

09:58:33

Chat People Raise React View Rooms Apps More Camera Mic Share Leave

Layth M. Alabdulsada (Guest)
THANK YOU ALL!

DAVID PÉREZ LÓPEZ

B. Y. Chen (Guest)

Dr. Figula Ágota ...

Gabriel Măcsim (Guest)

Koji Matsumoto (Guest)

Simona Marinescu

Alfonso Romero (Guest)

AN VM
Ana Irina N... VERONICA ...

OC JJ
Ovidiu Calin JUAN DE D...

LA IC
Layth M. AL... Ildefonso C...

MJ DH
Marilena Ji... Dipankar H...

PC ...
Carretero, ... View all

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

09:34:14

Pop out Chat People 42 Raise React View Rooms Apps More Camera Mic Share Leave

Acrobat Pro Archivo Edición Ver Ventana Ayuda

RIGA 2023.pdf

Inicio Herramientas Documento

1 (1 de 21)

189%

Iniciar sesión

Rigidity of hypersurfaces with constant higher order mean curvature in space forms

Oscar Palmas
oscar.palmas@ciencias.unam.mx

Facultad de Ciencias
Universidad Nacional Autónoma de México (UNAM)

Riemannian Geometry and Applications - RIGA
Bucarest, Romania, September 22-24, 2023

Supported by CONAHCYT, SNII 16167 and DGAPA-UNAM, PAPIIT IN101322

Oscar Palmas (Guest)

Oscar Palmas - UNAM, México

Rigidity of hypersurfaces in space forms

Ana Irina Nistor

AN

Ana Irina N...

View all

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

The screenshot shows a Microsoft Teams meeting window titled "RIGA 2023". The top bar includes a status bar with a shield icon, a red circle, and the time "09:10:05". The main toolbar contains icons for "Pop out", "Chat", "People" (38), "Raise", "React", "View", "Rooms", "Apps", "More", "Camera", "Mic", "Share", and a red "Leave" button.

The central part of the screen displays a presentation slide from a PDF file named "main.pdf". The slide content is as follows:

In [3], we proved that every geodesic of ∇ is a normal extremal, and vice versa. More precisely, we have shown that the coordinate expression for the sub-Hamiltonian vector field $\vec{H}$ equals:

$$\vec{H}(x, p) = g^{ij}(x, p)p_j \frac{\partial}{\partial x^i} - \frac{1}{2} \frac{\partial g^{ij}}{\partial x^k}(x, p)p_i p_j \frac{\partial}{\partial p_k}.$$

Comparing the latter formula with the definition of Γ^∇ , yields that

$$\Gamma^\nabla(x, p) = \vec{H}(x, p).$$

At the bottom of the slide, there is a small circular logo of the University of Bucharest.

On the right side of the Teams window, there is a vertical list of participants. The top two participants are visible in video thumbnails. Below them, there are icons for mute, video on/off, and a list of other participants. The bottom of the Teams window shows a status bar with the name "Layth M. Alabdulsada (QU)", a "Stop sharing" button, and the date "September 22, 2023".

RIGA 2023

BUCHAREST, SEPTEMBER 22-24, 2023

RIGA 2023

08:10:13

Take control Pop out Chat People 42 Raise React View Rooms Apps More Camera Mic Share Leave

Introduction Preliminaries Results Conclusions

Fundamental problems in Submanifold Theory Purposes

- S. Decu and S. Haesen, *Chen Inequalities for Spacelike Submanifolds in Statistical Manifolds of Type Para-Kahler Space Forms*, Mathematics **10** (2022)
- S. Decu and G.-E. Vîlcu, *Casorati inequalities for statistical submanifolds in Kenmotsu statistical manifolds of constant ϕ -sectional curvature with semi-symmetric metric connection*, Entropy **24** (2022)

Simona Marinescu

In this meeting (42) Mute all

- Adela Mihai Organizer
- AB Adara M. Blaga (Guest) Meeting guest
- AC Alexandru Cioba... (Guest) Meeting guest
- AR Alfonso Romero (Guest) Meeting guest
- AP Amrinder Pal (Guest) Meeting guest
- AN Ana Irina Nistor (Guest) Meeting guest
- AO Andreea Olteanu
- BC B. Y. Chen (Guest) Meeting guest
- BŞ Broscăţeanu Ştef... (Guest) Meeting guest
- PC Carretero, Paula (Guest) Meeting guest
- DL DAVID PÉREZ LÓPEZ
- DU Deniz Ulusoy
- DH Dipankar Hazra (Guest) Meeting guest

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04:14:39

Chat People 50 Raise React View Rooms Apps More Camera Mic Share Leave

KF LA AF IM MT RD KF DL MM R

Kornélia Ficzer (Guest) Layth M. Al... Agota Figula (G... Ion Mihai Mukut Ma... Ryszard De... Kornélia Fic... D.R. Latcu (... Marius Mir... rashmi.sac... View all

Ryszard Deszcz JUAN DE DIOS PÉREZ JIMÉNEZ Zlatko Erjavec DAVID PÉREZ LÓPEZ Mohammed Mohammed (2180... Ana Irina Nistor Şemsi Eken Meriç (Konuk) sibel.gerdan Małgorzata Glogowska (Gość) Ovidiu Calin Ildefonso Castro Milos Petrovic PETRE VALENTIN GHISOIU Simona-Luiza Druta-Romaniuc Andreea Olteanu mcrasm Alfonso Romero Bejan Cornelia-Livia Marian Ioan Munteanu Mukut Mani Tripathi Şab... Agota Figula Ion Mihai Kornélia Ficzer Adela Mihai Çağrıhan Cimen

RIGA 2023

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04:14:20

Chat

People 49

Raise

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Rooms

Apps

More

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Share

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Agota Figula (Gu...

Alfonso Romero (Guest)

Kornélia Ficzere (Guest)

LA

AC

AR

DK

MA

GM

DL

MM

R

...

Layth M. Al...

Alexandru ...

ALFONSO ...

Djordje Ko...

M. Evren A...

Gabriel Ma...

D.R. Latcu (...)

Marius Mir...

rashmi.sac...

View all

Change scene

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Chat

People 49

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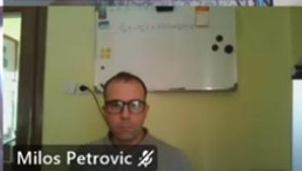
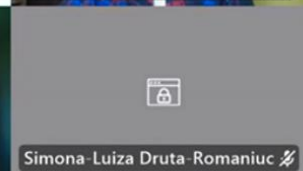
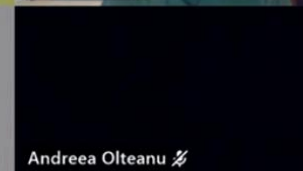
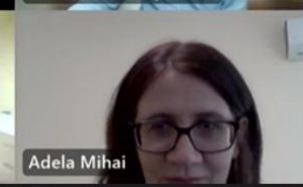
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 Ryszard Deszcz	 JUAN DE DIOS PÉREZ JIMÉNEZ	 Zlatko Erjavec	 DAVID PÉREZ LÓPEZ	 Mohammed Mohammed (2180...
 Ana Irina Nistor	 Şemsi Eken Meriç (Konuk)	 sibel.gerdan	 Małgorzata Głogowska (Gość)	 Ovidiu Calin
 Ildefonso Castro	 Milos Petrovic	 PETRE VALENTIN GHISOIU	 Simona-Luiza Druta-Romaniuc	 Andreea Olteanu
 mcraism	 Alfonso Romero	 Bejan Cornelia-Livia	 Şab...	 Mukut Mani Tripathi
 Marian Ioan Munteanu	 Agota Figula	 Ion Mihai	 Kornélia Ficzere	 Adela Mihai

Kornélia Ficzere (Guest)

LA

Layth M. Al...

KF

Kornélia Fic...

IM

Ion Mihai

AF

Agota Figula (G...

MT

Mukut Ma...

RD

Ryszard De...

AC

Alexandru ...

AR

ALFONSO ...

DK

Djordje Ko...

...

View all