Talks at Calista 2nd General Meeting.

Sofia, 27-31.5.2024

Talks at Special Event, 30.5.2024, 17:00

Rita Fioresi   Deep Learning and the Artificial Intelligence Revolution

Juraj Tekel   What do microwave and X-ray have in common?

And what does quantum gravity have to do with it?

Talks at general sessions

Simonetta Abenda   Spectral Data for Real Regular KP solutions on Rational

Degenerations of M-curves and tropical M-curves

Lilia Anguelova   Hidden Symmetries and the Dark Universe

Jesus Gustavo Angulo   Lattice theory and algebraic models for deep learning based

on mathematical morphology

Paolo Aschieri   Noncommutative geometry and physics, old and new

Yacine Barhoumi   Max-independance structures in integrable probability

Alessandro Carotenuto   The complex geometry of the full flag manifold of quantum SU_3

[Ivan Dimitrov](#)	Inversion sets of roots
[Rita Fioresi](#)	Mathematical models for the visual pathway and Deep Learning
[Tatiana Gateva-Ivanova](#)	Algebras defined by Lyndon words and Artin-Schelter regularity
[Elitza Hristova](#)	Some relatively free algebras and their structure as GL(n)-modules
[Violeta Ivanova-Rohling](#)	On monomial Lie algebras defined by Lyndon words
[Jens Kaad](#)	Spectral metrics on quantum projective spaces
[Andrey Krutov](#)	Clifford algebra analogue of the Cartan theorem
[Maria A. Lledó](#)	Science communication
[Benjamin McKay](#)	Chern-Simons invariants of Cartan geometries
[Alexander Mikhailov](#)	Commutative Poisson algebras from deformations of noncommutative algebras and non-Abelian Hamiltonian systems
[Antti Niemi](#)	Timecrystalline Vortices, Saddle Points and the Poincare Index Formula

Damjan Pistalo	The category of strong homotopy Lie Rinehart pairs
Todor Popov	Landau problem and Dirac's remarkable SO(2,3)-representation
Junaid Razzaq	Fundamental theorems of super invariant theory
Andrea Santi	On intransitive 3-nondegenerate CR manifolds in dimension 7
Andrea Sciandra	Noncommutative differential geometry on crossed product algebras
Denitsa Staicova	Probing for Lorentz Invariance Violation in Pantheon Plus Dominated Cosmology
Neli Stoilova	Z_2 x Z_2-graded Lie (super)algebras and generalized quantum statistics
Karen Strung	Realising quantum flag manifolds as graph C*-algebras
Juraj Tekel	Connection unexpected -- a case study in science outreach
Svjetlana Terzic	Toric topology of Grassmann manifolds and weighted stable curves
Dennis The	On 4D split-conformal structures with G2-symmetric twistor distribution
Kostadin Trenchevski	Geometrical description and structure of the photon and electron