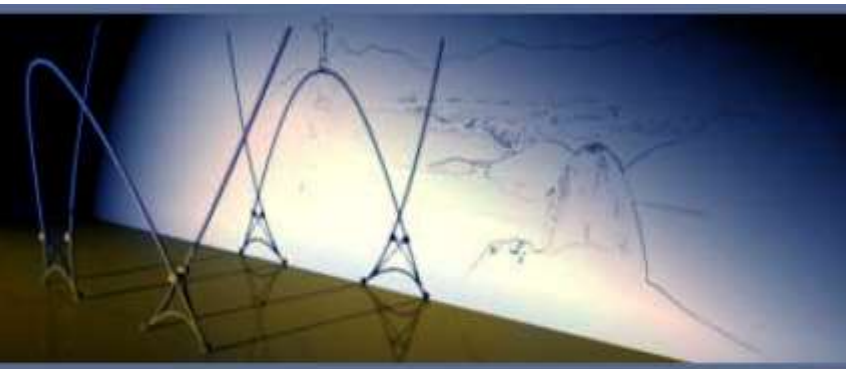


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March 02 - 07, 2020

# CERTIFICATE



We hereby certify that, **Abramo Hefez - Universidade Federal Fluminense**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Sets of values of fractional ideals**”.

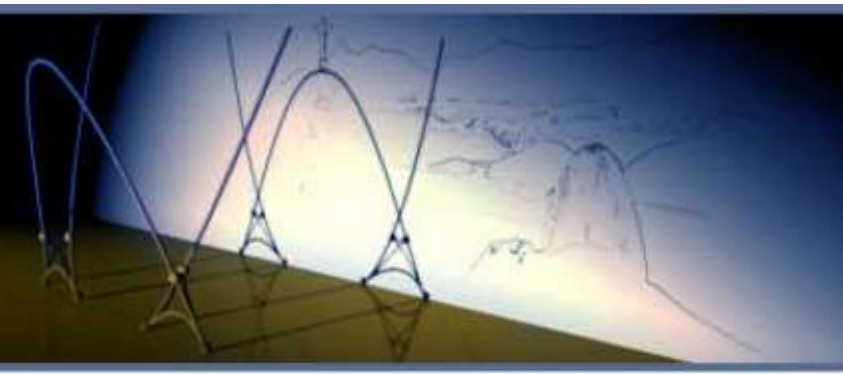
Rio de Janeiro, March 09<sup>th</sup>, 2020

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Organizing Committee

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March 02 - 07, 2020

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We hereby certify that, **Ana Claudia Nabarro** - Inst. Ciên. Matemática e Comp. de São Carlos, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Asymptotic directions of spacelike submanifolds and associated Surfaces with non isolated singularities**”.

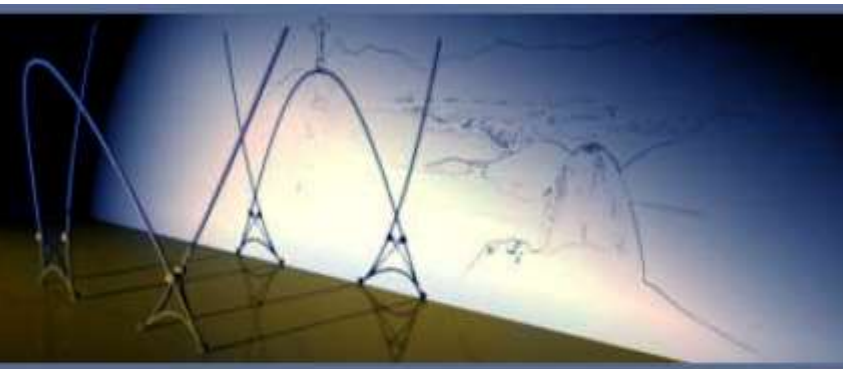
Rio de Janeiro, March 09<sup>th</sup>, 2020

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We hereby certify that, **Antoni Rangachev - University of Chicago**, participated in the *International Meeting of young researchers in Singularity Theory & in the IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Generalized smoothability**”.

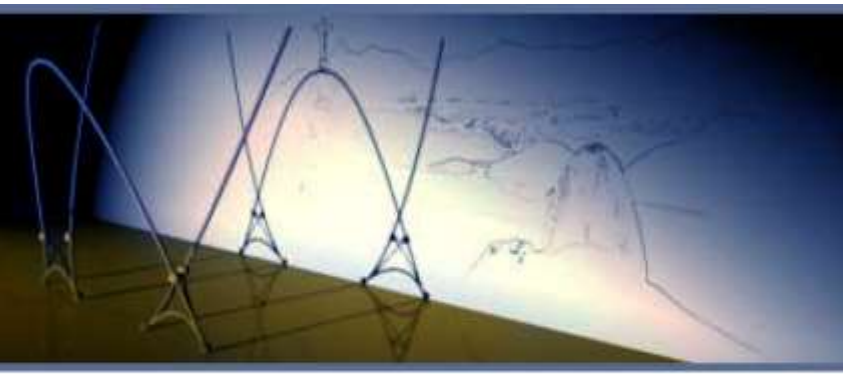
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# CERTIFICATE



We hereby certify that, **Carolina Bhering de Araujo** - Instituto de Matemática Pura e Aplicada, participated in the *International Meeting of young researchers in Singularity Theory & in the IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Special subgroups of the Cremona group via Calabi-Yau pairs**”.

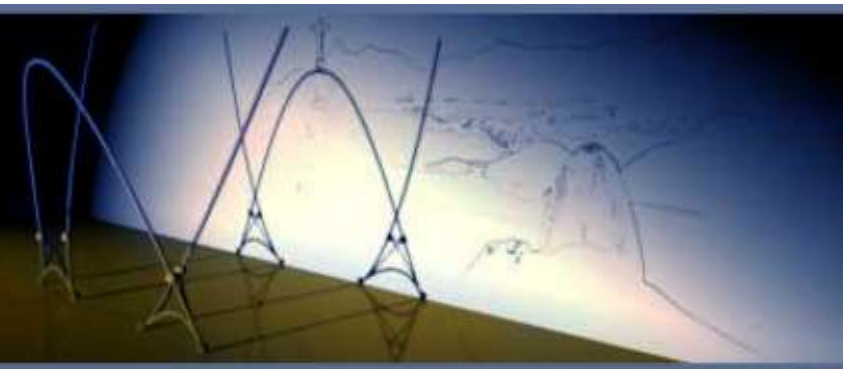
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We hereby certify that, **Daniel Duarte - Universidad Autónoma de Zacatecas**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Nash blowups in positive characteristic**”.

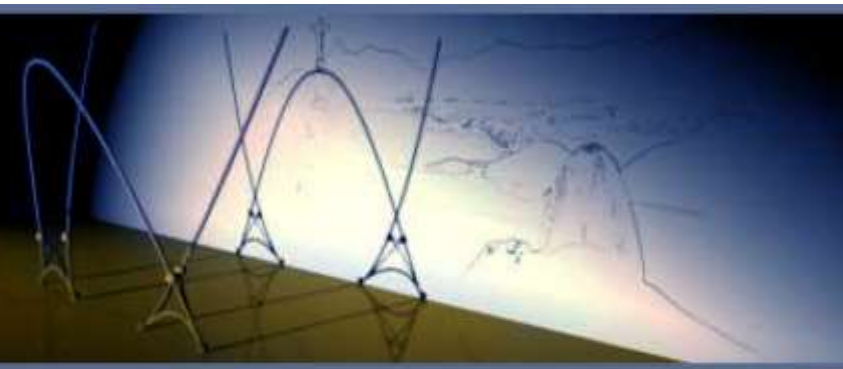
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We hereby certify that, **Dominik Wrazidlo - Kyushu**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk:  
**“Cobordism of Morse functions, and applications to map germs at boundary points”**.

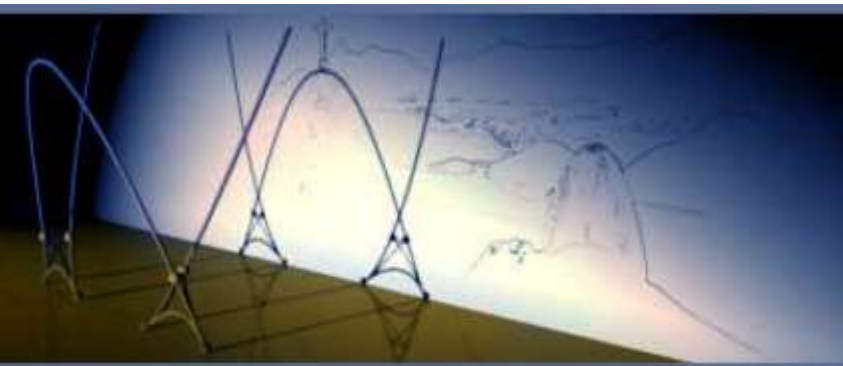
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We hereby certify that, **Enrique Chavez Martinez - Universidad Nacional Autonoma de Mexico**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**On a conjecture of the higher Nash blow-up on curves**”.

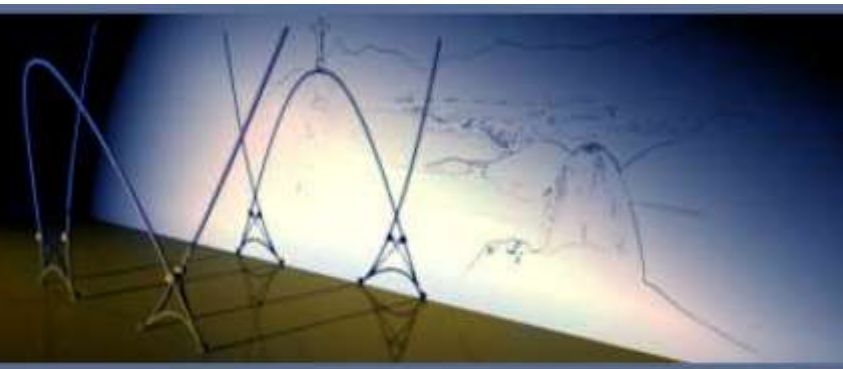
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We hereby certify that, **Ethan Cotterill** - **Universidade Federal Fluminense**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Rational curves with hyperelliptic singularities**”.

Rio de Janeiro, March 09<sup>th</sup>, 2020

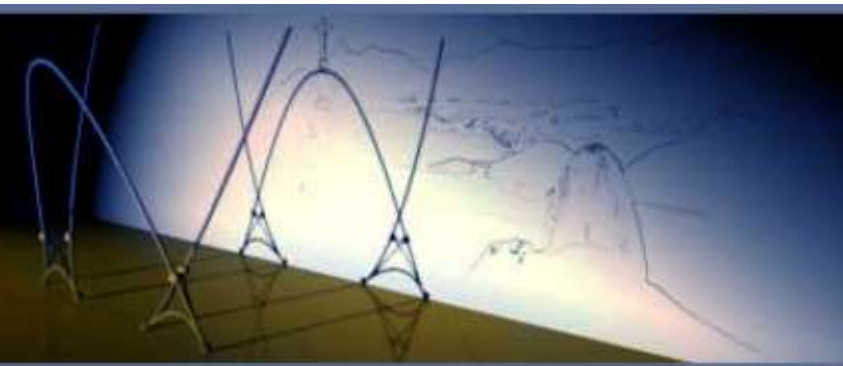
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We hereby certify that, **Guillermo Peñafort Sanchis - Universitat de València**, participated in the *International Meeting of young researchers in Singularity Theory & in the IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Connectivity results for singular map-germs**”.

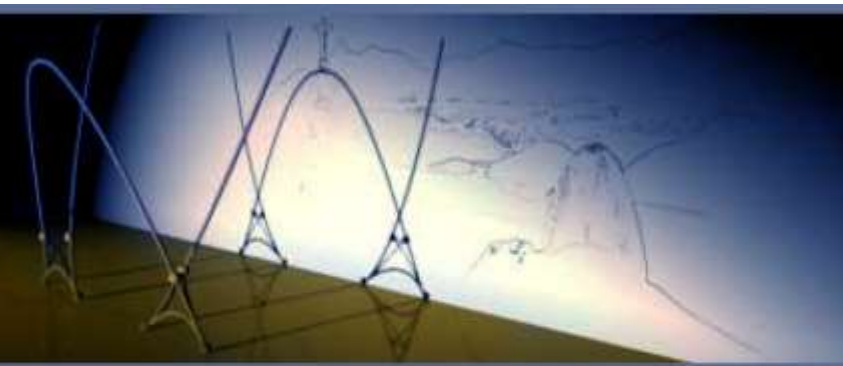
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We hereby certify that, **Ingrid Sofia Meza Sarmiento** - **Universidade Federal de São Carlos**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Topological Classification of circle-valued simple Morse–Bott functions on orientable surfaces**”.

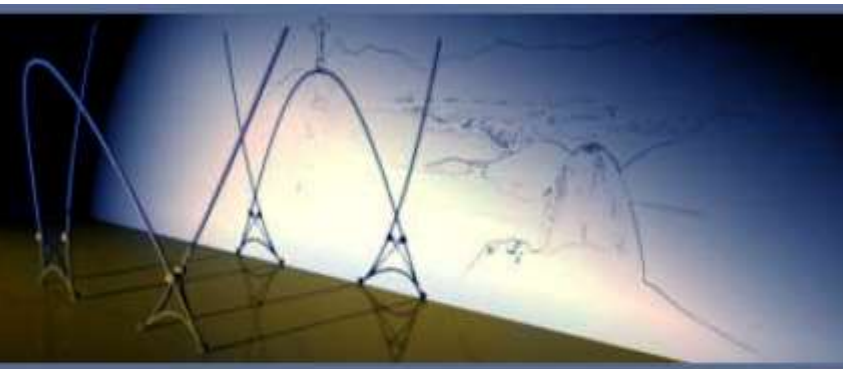
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# CERTIFICATE



We hereby certify that, **Josnei Antonio Novacoski** - **Universidade Federal de São Carlos**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Local uniformization and essentially finite generation of valuation rings**”.

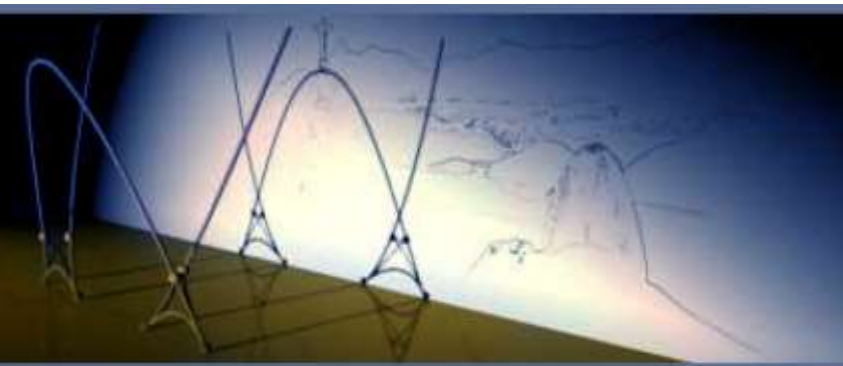
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We hereby certify that, **Leonardo Meireles Câmara** - Universidade Federal do Espirito Santo, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Some aspects of function-germs on the plane**”.

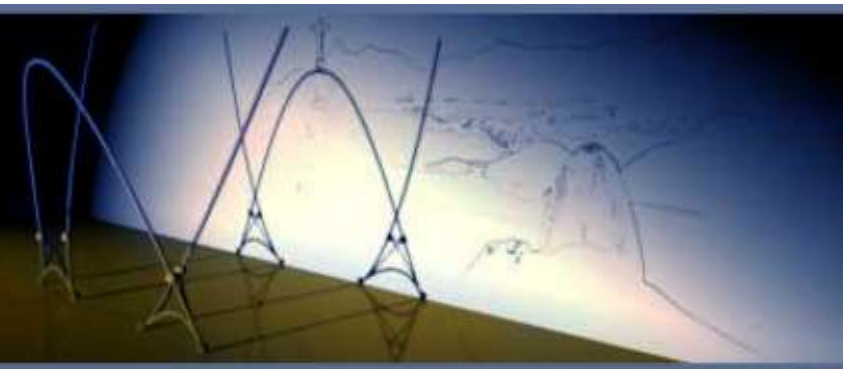
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We hereby certify that, **Míriam Garcia Manoel** - Inst. de Ciências Matemáticas e de **Computação**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Recognition of symmetries in reversible maps**”.

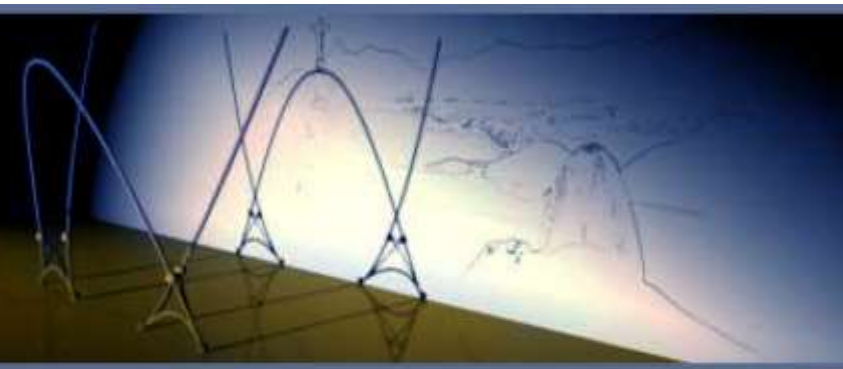
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We hereby certify that, **Nivaldo de Góes Grulha Junior** - Inst. Ciên. Matemática e Comp. de **São Carlos**, participated in the *International Meeting of young researchers in Singularity Theory & in the IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**One Poincaré-Hopf type formula for determinantal surfaces and three-varieties with isolated singularities**”.

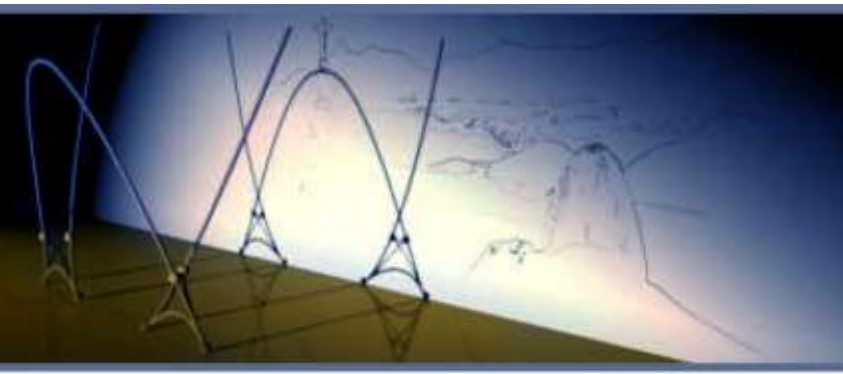
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We hereby certify that, **Otoniel Nogueira da Silva** - **Universidad Nacional Autonoma de Mexico**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Equisingularity in families of generically reduced curves**”.

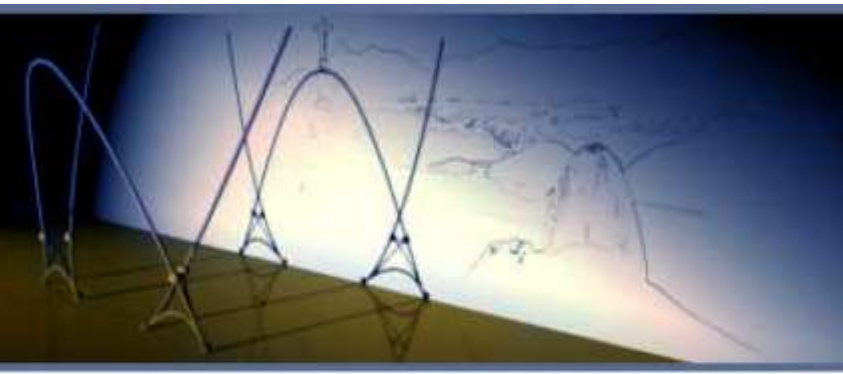
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We hereby certify that, **Patrícia Tempesta** - **Universidade Federal de São João del-Rei**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**The fundamental symmetry of homogeneous binary differential equations**”.

Rio de Janeiro, March 09<sup>th</sup>, 2020

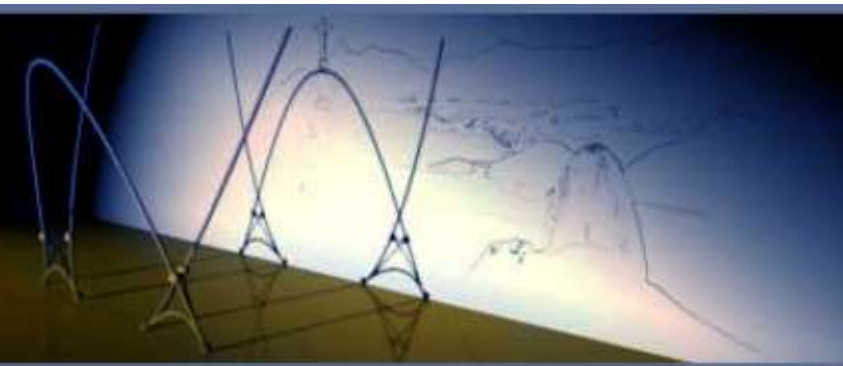
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# CERTIFICATE



We hereby certify that, **Pedro Benedini Riul** - **Universidade Federal de São João del-Rei**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Relating second order geometry of manifolds in Euclidean spaces through projections and normal sections**”.

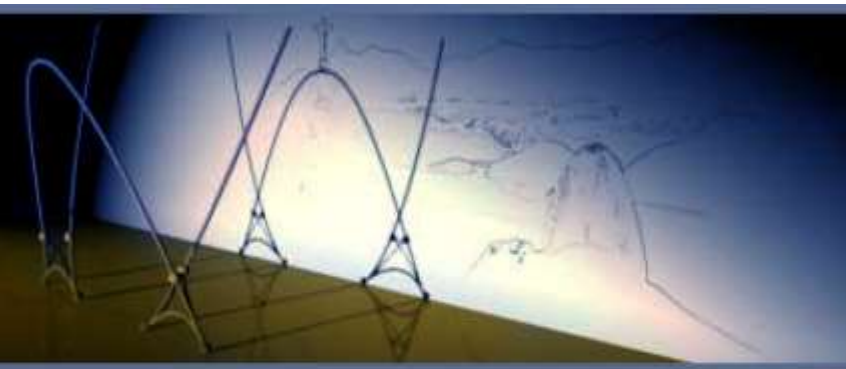
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# CERTIFICATE



We hereby certify that, **Rodrigo Salomão - Universidade Federal Fluminense**, participated in the *International Meeting of young researchers in Singularity Theory & in the IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Fibrations by singular curves on unirational surfaces**”.

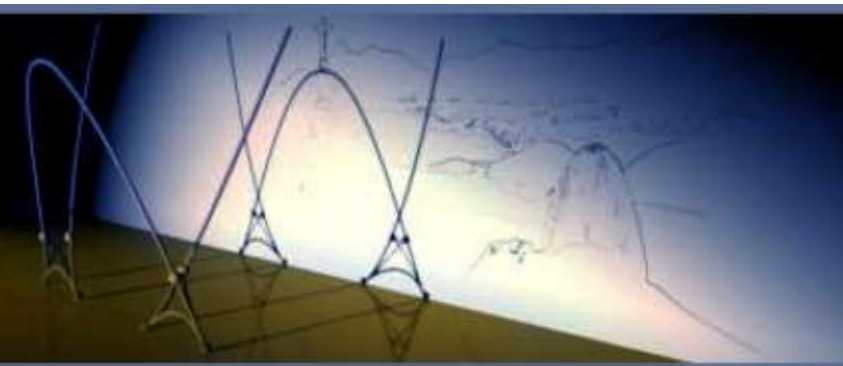
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# CERTIFICATE



We hereby certify that, **Rogério Santos Mol** - **Universidade Federal de Minas Gerais**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Residue-type indices for germs of holomorphic vector fields in the plane**”.

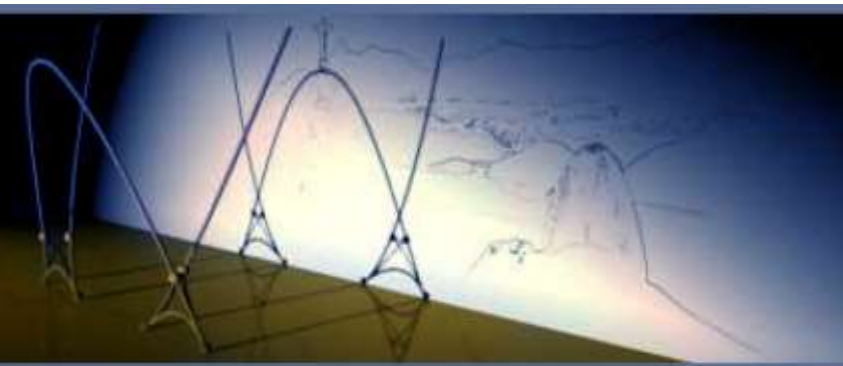
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We hereby certify that, **Sergey Agafonov** - **Universidade Estadual Paulista - São José do Rio Preto**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Webs on surfaces and integrability of geodesic flow**”.

Rio de Janeiro, March 09<sup>th</sup>, 2020

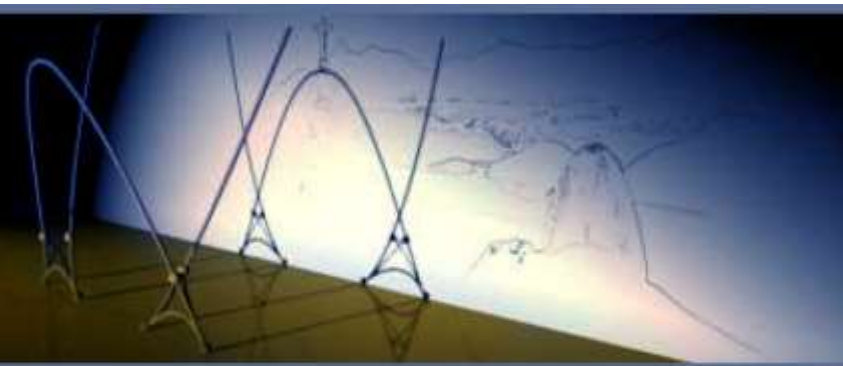
A handwritten signature in blue ink, appearing to read "Marcelo José Saia".

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We hereby certify that, **Stanislaw Janeczko** - **Institute of Mathematics, Polish Academy of Sciences**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Algebraic and geometric restrictions of differential forms**”.

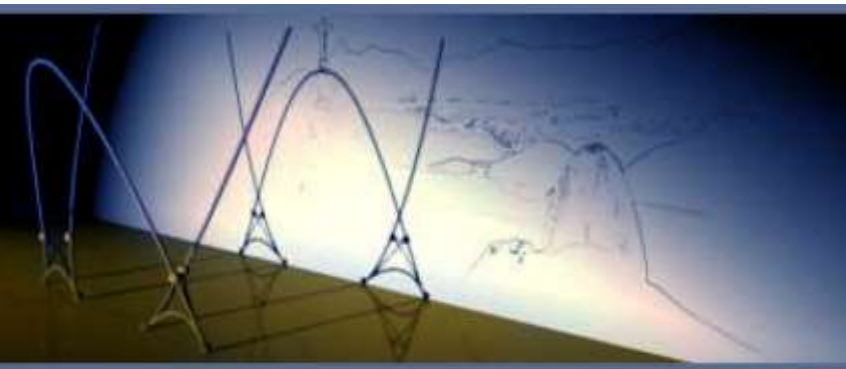
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We hereby certify that, **Terence Gaffney - Northeastern University, Boston, Usa**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**An Approach to the Whitney Equisingularity of Families of Complete Intersection Germs with Non-isolated Singularities**”.

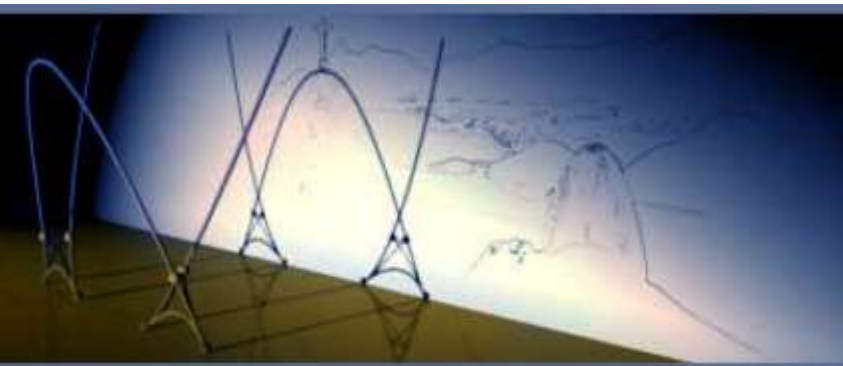
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We hereby certify that, **Thaís Maria Dalbelo** - **Universidade Federal de São Carlos**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Invariants and Whitney Equisingularity of Images of Finite Morphisms**”.

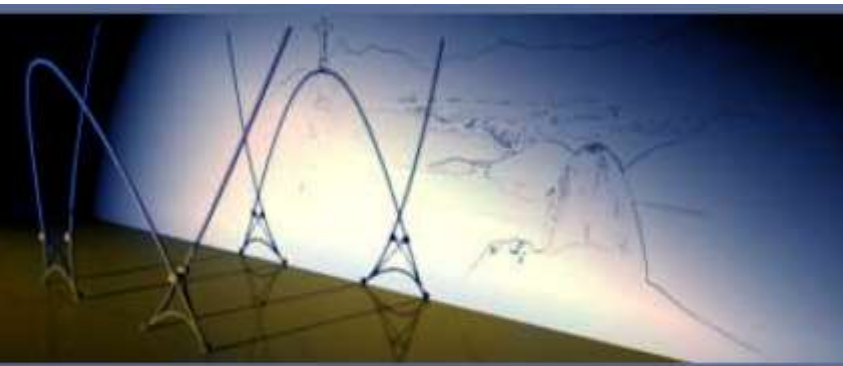
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We hereby certify that, **Thiago Filipe da Silva** - **Universidade Federal do Espirito Santo**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**The double structure for arbitrary modules and schemes**”.

Rio de Janeiro, March 09<sup>th</sup>, 2020

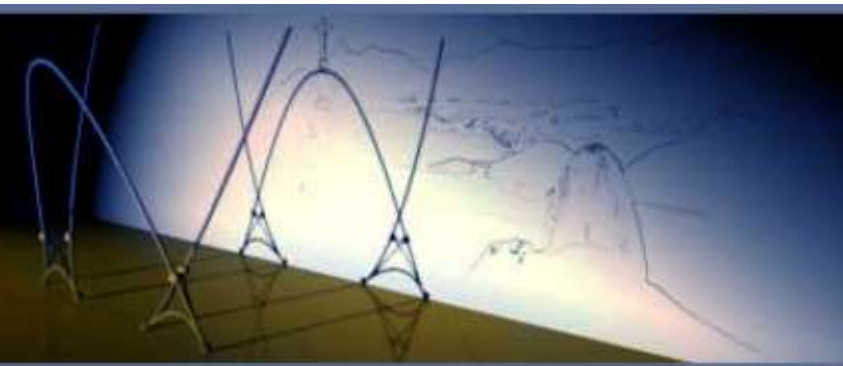
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We hereby certify that, **Vincent Jean Henri Grandjean** - **Universidade Federal do Ceará**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**Real Equisingularity and continuity of curvatures integrals**”.

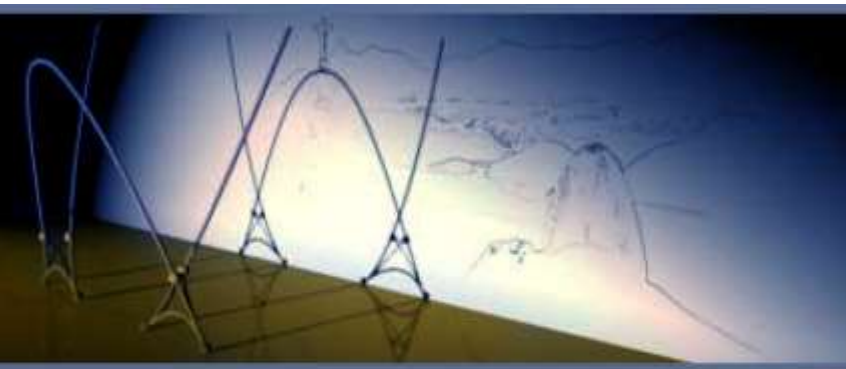
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# CERTIFICATE



We hereby certify that, **Zbigniew Jelonek** - **Polish Academy of Sciences**, participated in the *International Meeting of young researchers in Singularity Theory* & in the *IX Workshop on Algebraic Theory of Singularities*, held at IMPA, Rio de Janeiro, from March 02 – 07, 2020 and presented the following Plenary Talk: “**On the Whitney theorem for complex polynomial mappings**”.

Rio de Janeiro, March 09<sup>th</sup>, 2020

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