

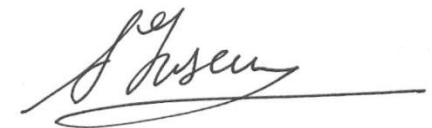
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**Brazilian Workshop on  
Continuous Optimization**

IMPA, Rio de Janeiro, Brazil  
September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Ademir Alves Ribeiro** - **Universidade Federal do Paraná**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**On the optimal separating hyperplane for arbitrary sets: a generalization of the support vector machine formulation and a convex hull approach**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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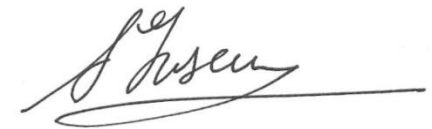
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Alexander Kruger** - **Federation University Australia**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Extremal principle: 40 years' jubilee**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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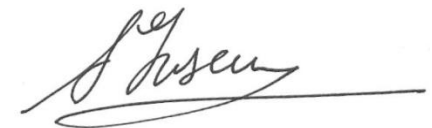
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Carolina Effio Saldivar** - **Universidade Federal do Rio de Janeiro**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**A feasible direction interior point method for Generalized Nash Equilibrium Problem with shared constraints**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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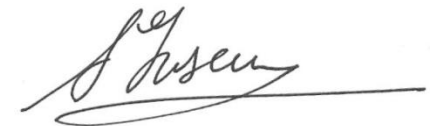
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Damián Fernández - Universidad Nacional de Córdoba**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Augmented Lagrangian quadratic growth and second-order sufficient optimality conditions**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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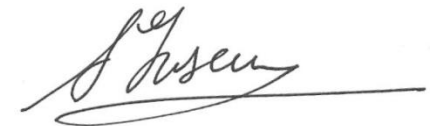
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Felipe Ignacio Lara Obreque** - **Universidad de Tarapacá**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Global Directional Derivatives for Nonconvex Optimization Problems**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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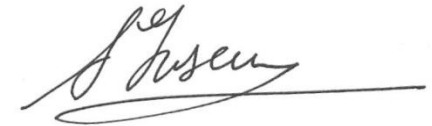
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

# CERTIFICATE

We hereby certify that, ***Fernanda Maria Pereira Raupp*** - **Laboratório Nacional de Computação Científica**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: **“Projection onto a level set of a quadratic function revisited”**.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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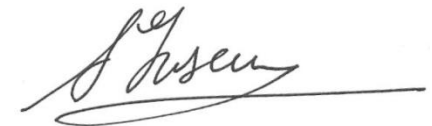
# XIII Brazilian Workshop on Continuous Optimization

IMPA, Rio de Janeiro, Brazil  
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# CERTIFICATE

We hereby certify that, **Gabriel Haeser** - Instituto de Matemática e Estatística da USP, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Two new optimality conditions for nonlinear symmetric cone programming**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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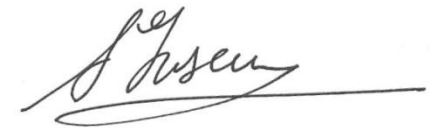
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

# CERTIFICATE

We hereby certify that, **Jefferson Divino Gonçalves de Melo** - **Universidade Federal de Goiás**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Convergence rate bounds for a proximal ADMM for solving nonconvex linearly constrained problems**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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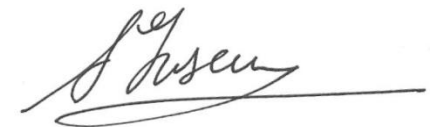
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

# CERTIFICATE

We hereby certify that, **João Carlos de Oliveira Souza** - **Universidade Federal do Piauí**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Accelerated proximal point method for DC functions in Hadamard manifolds**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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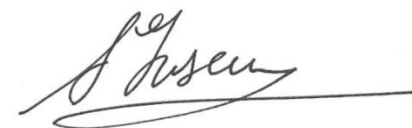
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# CERTIFICATE

We hereby certify that, **João Xavier da Cruz Neto** - **Universidade Federal do Piauí**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Computing Riemannian center of mass on Hadamard manifolds**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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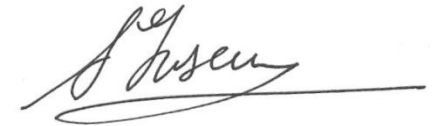
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# CERTIFICATE

We hereby certify that, **Joaquim Judice** - Instituto de Telecomunicações, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**An alternating direction method of multipliers for the eigenvalue complementarity problem**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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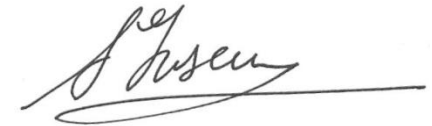
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Jose Alberto Ramos Flor** - **Universidade Federal do Paraná**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**On constraint qualifications for multiobjective optimization**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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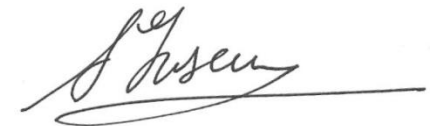
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# CERTIFICATE

We hereby certify that, **Leandro da Fonseca Prudente** - **Universidade Federal de Goiás**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**On the extension of the Hager-Zhang conjugate gradient method for vector optimization**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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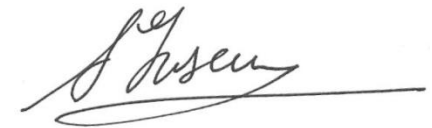
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

# CERTIFICATE

We hereby certify that, **Léonard von Niederhäusern** - **Center for Mathematical Modeling - Chile**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**A Multi-Leader-Follower Game for Energy Demand-Side Management**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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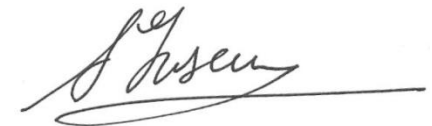
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# CERTIFICATE

We hereby certify that, **Leonardo Delarmelina Secchin** - **Universidade Federal do Espírito Santo**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Bilevel optimization with a multiobjective problem in the lower level**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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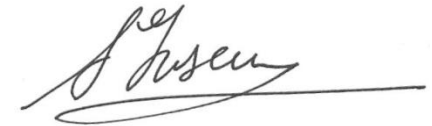
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# CERTIFICATE

We hereby certify that, **Letícia Becher da Silva** - **Universidade Federal do Paraná**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**A modification of the LP-Newton method under the Hölder metric subregularity assumption**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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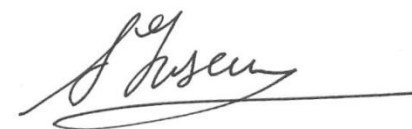
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Luis Felipe Cesar da Rocha Bueno** - **Universidade Federal de São Paulo**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**On the complexity of solving feasibility problems**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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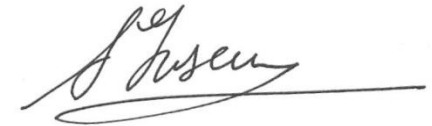
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Luis Mauricio Graña Drummond** - **Universidade Federal do Rio de Janeiro**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**A conjugate directions method for multicriteria**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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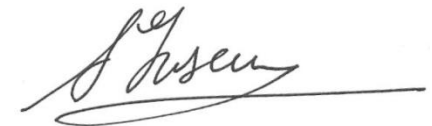
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IMPA, Rio de Janeiro, Brazil  
September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

# CERTIFICATE

We hereby certify that, **Maicon Marques Alves** - **Universidade Federal de Santa Catarina**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Relative-error inertial-relaxed inexact versions of Douglas-Rachford and ADMM splitting algorithms**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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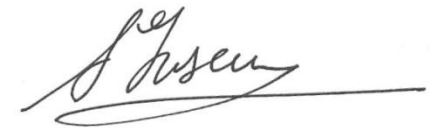
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IMPA, Rio de Janeiro, Brazil  
September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

# CERTIFICATE

We hereby certify that, **Mario Souto** - **Pontifícia Universidade Católica do Rio de Janeiro**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Exploiting Low-Rank Structure in Semidefinite Programming by Approximate Operator Splitting**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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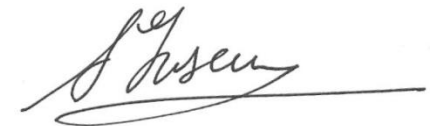
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Mauricio Romero Sicre - Universidade Federal da Bahia**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**On the complexity of some projective splitting methods for solving monotone inclusion problems**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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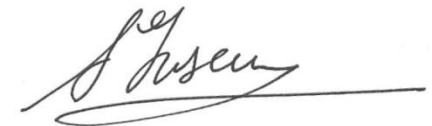
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IMPA, Rio de Janeiro, Brazil  
September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Natasa Krejic** - Faculty of Sciences – University of Novi Sad, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Inexact restoration with subsampled trust-region methods for finite-sum minimization**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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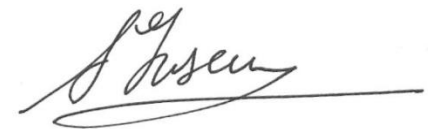
## Brazilian Workshop on Continuous Optimization

IMPA, Rio de Janeiro, Brazil  
September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

# CERTIFICATE

We hereby certify that, **Nicolas Esteban Fuentealba Armijo** - Instituto de Matemática e Estatística da USP, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “Exact relaxations of non-convex trust region subproblems with an additional quadratic constraint”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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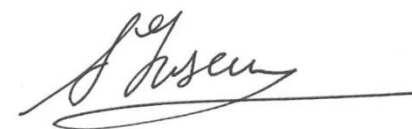
## Brazilian Workshop on Continuous Optimization

IMPA, Rio de Janeiro, Brazil  
September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

# CERTIFICATE

We hereby certify that, **Orestes Martín Bueno Tangoa - Universidad del Pacifico**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**On the construction of maximal p-cyclically monotone operators**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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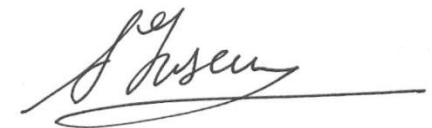
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Orizon Pereira Ferreira - Universidade Federal de Goiás**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Interaction-complexity and asymptotic analysis of steepest descent method for multiobjective optimization on Riemannian manifolds**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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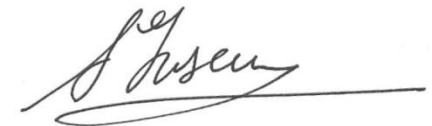
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CERTIFICATE

We hereby certify that, **Paulo José da Silva e Silva - IMECC**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Robust Nonlinear Support Vector Machine based on Difference of Convex Functions**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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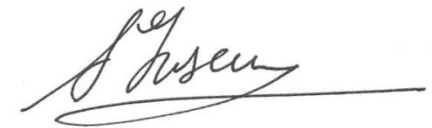
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IMPA, Rio de Janeiro, Brazil  
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# CERTIFICATE

We hereby certify that, **Philip Thompson - University of Cambridge**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Topics in stochastic gradient approximation**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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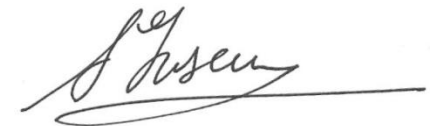
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# CERTIFICATE

We hereby certify that, **Rafael Durbano Lobato** - **Università di Pisa**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**SMS++: a Structured Modelling System for (Among Others) Multi-Level Stochastic Problems**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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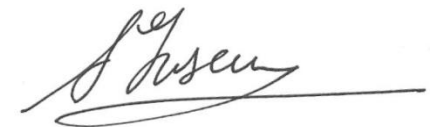
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

# CERTIFICATE

We hereby certify that, **Roberto Andreani - IMECC**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**New sequential optimality conditions for mathematical programs with complementarity constraints and algorithmic consequences**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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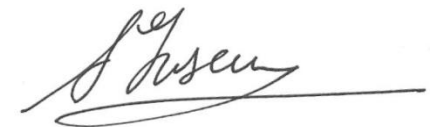
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September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Roger Behling** - **Fundação Getúlio Vargas**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**On generalized circumcenters and applications**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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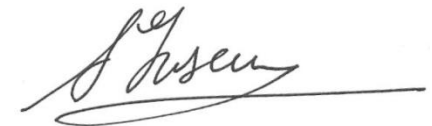
# XIII Brazilian Workshop on Continuous Optimization

IMPA, Rio de Janeiro, Brazil  
September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

# CERTIFICATE

We hereby certify that, **Teles Araujo Fernandes** - **Universidade Estadual do Sudoeste da Bahia**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Damped Newton Method on Riemannian Manifolds**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



Alfredo Iusem  
Organizing Committee



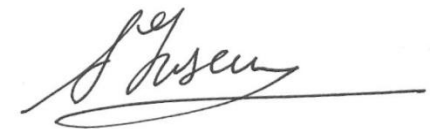
XIII celebrating Alfredo Iusem's 70th birthday  
**Brazilian Workshop on  
Continuous Optimization**

IMPA, Rio de Janeiro, Brazil  
September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

CERTIFICATE

We hereby certify that, **Thadeu Alves Senne - Universidade Federal de São Paulo**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**On the solution of nonlinear systems arising from topology optimization of structures under geometrical nonlinearities**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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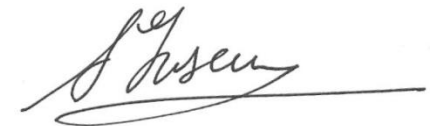
# XIII Brazilian Workshop on Continuous Optimization

IMPA, Rio de Janeiro, Brazil  
September 23<sup>rd</sup> to 27<sup>th</sup>, 2019

# CERTIFICATE

We hereby certify that, **Wilfredo Sosa Sandoval** - **Universidade Catolica de Brasilia**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**A variant of Equilibrium Problem**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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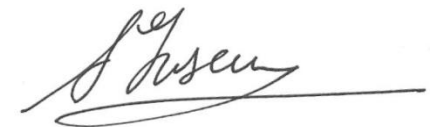
XIII celebrating Alfredo Iusem's 70th birthday  
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CERTIFICATE

We hereby certify that, **Yboon Victoria García Ramos - Universidad del Pacifico**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**Lower limits of type (d) monotone operators in general Banach spaces**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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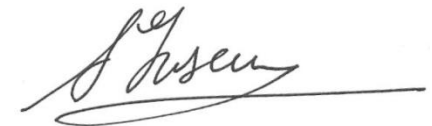
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# CERTIFICATE

We hereby certify that, **Yunier Bello-Cruz - Northern Illinois University**, participated in the *XIII Brazilian Workshop on Continuous Optimization* held at IMPA, Rio de Janeiro, September 23 – 27, 2019 and presented the following Contributed Talk: “**A Semi-Smooth Newton Method for Projection Equations**”.

Rio de Janeiro, September 27<sup>th</sup>, 2019



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