



International Congress on Industrial and Applied Mathematics

JULY 15-19
VALENCIA · SPAIN



ICIAM
2019

AUTHORS GUIDELINES

Scientific Program

[GO BACK](#)

[GO HOME](#)

CP FT-1-8 6

Mathematics and Computer Science II – Part 1 of 1

17/07/2019 | 14:30 – 16:30

Room: FT-1-8

(Note: [Click title to show the abstract](#))

Chair Person: Mermri El Bekkaye

17/07/2019

14:30

[Implementation of the finite element method with C program to solve partial differential equations](#)

Authors:

Mermri El Bekkaye. *Faculty Of Science, University Mohammed Premier*

Mellah Zhor. *Faculty Of Science, University Mohammed Premier*

14:50 17/07/2019
[A numerical investigation on the structure of the zeros of the q-sigmoid polynomials](#)

Authors:

Jung Yoog Kang. *Silla University*

15:10 17/07/2019
[On performance, portability and library reuse: A Navier-Stokes miniapp](#)

Authors:

Valeria Barra. *University Of Colorado Boulder*

Jed Brown. *University Of Colorado Boulder*

Jeremy Thompson. *University Of Colorado Boulder*

Yohann Dudouit. *Lawrence Livermore National Laboratory*

Abstract:

We demonstrate library reuse via a Navier-Stokes miniapp, where differential operators are expressed via a pointwise representation of the weak form, and composed using libCEED to act on subdomains with various execution strategies to exploit tensor product structure and symmetries of high order/spectral elements, and to enable vectorization on diverse architectures.

15:30 17/07/2019
[Efficient Parallel Numerical Schemes for Reaction-Diffusion System by Domain Decomposition](#)

Authors:

Aswin V S. *National Institute Of Technology Calicut*

Raghu H V. *Center For Development Of Advanced Computing*

Ashish Awasthi. *National Institute Of Technology Calicut*

15:50 17/07/2019
[Digital topological rough set structures and their applications](#)

Authors:

Sang-eon Han. *Chonbuk National University*

16:10 17/07/2019
[An Efficient Algorithm for Computing Derivative of Mean Structural](#)

Technical Secretariat

Marià Cubí 4 - Pral
08006 Barcelona (SPAIN)

T. +34 932388777
F. +34 932387488

iciam2019@pacifico-meetings.com



— PRIVATE AREA