



Conference Programme



Associação Portuguesa de Mecânica Teórica, Aplicada e Computacional



Co-Chairs:

João Manuel R. S. Tavares (tavares@fe.up.pt)

Renato M. Natal Jorge (rnatal@fe.up.pt)

PROGRAMME

Monday, October 19

9:00 – 13:00		Registration		Room: El Veril	
14:00 – 14:15		Opening Session		Room: Adeje	
14:15 – 16:00		Keynotes I		Room: Adeje	
Primal-dual method for continuous max-flow approaches <i>Xue-Cheng Tai</i> High-Fidelity Image-Based Geometric Modeling and Mesh Generation for Engineering Applications <i>Yongjie Zhang</i>					
16:00 – 16:30		Coffee Break			
16:30 – 18:30		Oral Presentations			
Room: Adeje Chairpersons: Fiorella Sgallari, Mona Mihailescu			Room: Caleta Chairpersons: Marco Leo, Julien Andoche		
ORAL I			ORAL II		
16:30 – 16:50	Vessel Segmentation of Retinal Images with Fuzzy Morphology <i>P. Bibiloni, M. González-Hidalgo, S. Massanet</i>		16:30 – 16:50	Line Extraction via Phase Congruency with a Novel Adaptive Scale Selection for Poisson Noisy Images <i>V.A. Krylov, J.D.B. Nelson</i>	
16:50 – 17:10	Identification of subendocardial infarction – a feasibility study using synthetic ultrasonic image data of a left ventricular model <i>J. Żmigrodzki, S. Cygan, B. Leśniak-Plewińska, K. Kałużyński</i>		16:50 – 17:10	Bilateral filtering based biomedical image colorization <i>A. Popowicz, B. Smolka</i>	
17:10 – 17:30	Microcalcification segmentation in Full Field Digital Mammography <i>N. Martins, D. Veiga, C. Pereira, M. Ferreira, N. Alves, M. Delgado</i>		17:10 – 17:30	Non-intrusive and calibration free visual exploration analysis in children with autism spectrum disorder <i>D. Cazzato, F. Adamo, G. Palestra, G. Crifaci, P. Pennisi, G. Pioggia, L. Ruta, M. Leo, C. Distante</i>	
17:30 – 17:50	Unsupervised delineation of the vessel tree in retinal fundus images <i>N. Strisciuglio, M. Vento, G. Azzopardi, N. Strisciuglio, G. Azzopardi, N. Petkov</i>		17:30 – 17:50	Automatic Detection of Bones Based on the Confidence Map for Rheumatoid Arthritis Analysis <i>K. Radlak, N. Radlak, B. Smolka</i>	
17:50 – 18:10	An iterative algorithm for Total Variation minimization in DBT imaging <i>A.M. Mota, N. Matela, N. Oliveira, P. Almeida</i>		17:50 – 18:10	M5L: a Web-Based Computer Aided Detection System for Automated Search of Lung Nodules in Thoracic Computed Tomography Scans <i>A.Traverso, M. Agnello, P. Cerello, M. Saletta, S. Bagnasco, C. Peroni, E. Fiorina, M.E. Fantacci, A. Retico, E. Lopez Torres</i>	
18:10 – 18:30	Classification-Based Blood Vessel Segmentation in Retinal Images <i>J. Od, R. Kolar, V. Harabis, R.P. Tornow</i>		18:10 – 18:30	Semi-automatic tumor contouring method using PET and MRI medical images <i>S. Urbán, L. Ruskó, A. Nagy</i>	
19:00 – 19:45		Welcome Port of Honour (all participants are invited)			

Tuesday, October 20

9:00 – 9:45

Keynotes II

Room: Adeje

Virtual and Augmented Medical Imaging Environments: Applications to Simulation, Training, Surgical Planning and Interventional Guidance
Cristian A. Linte

09:50 – 10:30

Oral Presentations

Room: Adeje		Room: Caleta	
Chairpersons: Yongjie Zhang, Alexandre Falcão		Chairpersons: Henryk Palus, Arcady Putilov	
ORAL III		ORAL IV	
09:50 – 10:10	Mechanics-based analysis of the left atrium via echocardiographic imaging <i>S. Gabriele, L. Teresi, V. Varano, P. Nardinocchi, P. Piras, G. Esposito, P.E. Puddu, C. Torromeo, A. Evangelista</i>	09:50 – 10:10	Extraction of spectral drowsy component from the resting electroencephalographic signal for quick, objective and direct testing of sleepiness in absolute terms <i>A.A. Putilov, O.G. Donskaya, E.G. Verevkin</i>
10:10 – 10:30	A new thick-walled conical model of the left ventricle <i>B. Leśniak-Plewińska, S. Cygan, J. Żmigrodzki, K. Kałużyński</i>	10:10 – 10:30	The Illusion of a Blackbody at the Human Ear and the Human Temperature Measurement <i>A. Cardoso</i>

10:30 – 11:00

Coffee Break

11:00 – 12:20

Oral Presentations

Room: Adeje		Room: Caleta	
Chairpersons: Yongjie Zhang, Alexandre Falcão		Chairpersons: Henryk Palus, Arcady Putilov	
ORAL V		ORAL VI	
11:00 – 11:20	Diagnosis of Human Intestinal Parasites by Deep Learning <i>A.Z. Peixinho, S.B. Martins, J.E. Vargas, A.X. Falcão, J.F. Gomes, C.T.N. Suzuki</i>	11:00 – 11:20	The fast method of creating high dynamic range image for fluorescent microscopy applications <i>A. Bal</i>
11:20 – 11:40	Texture-energy features for microaneurysms detection <i>D. Veiga, N. Martins, C. Pereira, M. Ferreira, J. Monteiro</i>	11:20 – 11:40	Automatic cheek detection in digital images <i>M. Frackiewicz, H. Palus, K. Radlak</i>
11:40 – 12:00	Improved computer recognition of Fuhrman grading system in analysis of clear-cell renal carcinoma <i>M. Kruk, J. Kurek, S. Osowski, R. Koktysz</i>	11:40 – 12:00	Video-based Turkish Sign Language Recognition Systems <i>M. Aktas, E. B. Sonmez</i>
12:00 – 12:20	No-Reference Wavelet Based Retinal Image Quality Assessment <i>L.S. Abdel Hamid, A. El-Rafei, S. El-Ramly, G. Michelson, J. Hornegger</i>	12:00 – 12:20	A nonsmooth nonconvex sparsity-promoting variational approach for deblurring images corrupted by impulse noise <i>A. Lanza, S. Morigi, F. Sgallari</i>

13:00 – 14:00

Lunch

Restaurant El Jable

14:00 – 14:45

Keynotes III

Room: Adeje

Image restoration using variational approaches: some recent advances
Fiorella Sgallari

15:00 – 16:00

Oral Presentations

Room: Adeje		Room: Caleta	
Chairpersons: Isabel Figueiredo, Suzanne Shontz		Chairpersons: Lucio De Paolis, Roberto Jiménez	
ORAL VII		ORAL VIII	
15:00 – 15:20	A registration algorithm for microscopy images of the capillary bed <i>H. Rieiro, J.L. Alba Castro, S. Martinez-Conde, S.L. Macknik</i>	15:00 – 15:20	Augmented Reality in Radiofrequency Ablation of the Liver Tumors <i>L.T. De Paolis, F. Ricciardi</i>
15:20 – 15:40	Comparison of the internal structures of bones by microtomography <i>J.C.L. Stutz, J. S. Domínguez, J.T. de Assis</i>	15:20 – 15:40	Usage of mobile devices in a bone fracture reduction process <i>J.R. Jiménez, F. Paulano, J.M. Noguera, J.J. Jiménez</i>
15:40 – 16:00	Model adaptation for mesh generation of biological structures <i>A. Ramos-de-Miguel, R. Montenegro, J.M. Escobar</i>	15:40 – 16:00	Evaluation of Segmentation Techniques for Wound Area Identification <i>G.O. Zhang, P. Xiberta, A. Bardera, I. Boada, A. Romero</i>

16:00 – 16:30

Coffee Break

16:30 – 17:30

Oral Presentations

Room: Adeje		Room: Caleta	
Chairpersons: Isabel Figueiredo, Suzanne Shontz		Chairpersons: Lucio De Paolis, Roberto Jiménez	
ORAL IX		ORAL X	
16:30 – 16:50	Medical Volume Rendering based on Gradient Information <i>T.F. de Moraes, P.H.J. Amorim, J.V.L. da Silva, H. Pedrini, M.I. Meurer</i>	16:30 – 16:50	Automated image segmentation based on multiobjective optimization and machine learning <i>S.M. Shontz, J.S. Tahara, D.O. McLaurin, D.J.L. Colbry, B. Parikh</i>
16:50 – 17:10	A Variational Model for Image Fusion with simultaneous Cartoon and Texture Decomposition <i>M. Dodangeh, I.N. Figueiredo, G. Gonçalves</i>	16:50 – 17:10	Fractal descriptor on holographic images of cervical cells <i>M. Mihailescu, E.I. Scarlat, I.A. Paun, I. Grigorescu, R. Radu, O.T. Nedelcu</i>
17:10 – 17:30	Image Contrast Enhancement using Split Bregman Method <i>S.Gh. Bardeji, I.N. Figueiredo, E. Sousa</i>	17:10 – 17:30	Automated peritumoral edema segmentation in preoperative brain MRI scans <i>E. Binaghi, P. Melchiorre, L. Romitelli, S. Balbi, D. Lattanzi</i>
17:30 – 17:50	A proof of concept of an Augmented Reality system for Nuss Surgery <i>A. Ferreira, P. Morais, S. Queirós, F. Veloso, N.F. Rodrigues, J. Correia-Pinto, J.L. Vilaça</i>	17:30 – 17:50	Chaos theory-based quantification of ROIs for mammogram classification <i>J. Kurek, B. Swiderski, S. Dhahbi, M. Kruk, W. Barhoumi, G. Wiecezorek, E. Zagrouba</i>

19:30

Farewell Dinner

Restaurant La Choza

Wednesday, October 21

8:30 – 9:45

Keynotes IV

Room: Adeje

X-ray computed tomography and its applications

Xiaochuan Pan

Medical Image Segmentation using Object Shape Models: A Critical Review on Recent Trends, and Alternative Directions

Alexandre Xavier Falcão

09:50 – 10:30

Oral Presentations

Room: Adeje		Room: Caleta	
Chairpersons: António J. R. Neves, Eduard Rohan		Chairpersons: Bogdan Smółka, Félix Paulano	
ORAL XI		ORAL XII	
09:50 – 10:10	Forming tool inspection using fiber-optic sensor heads <i>S. Matthias, M. Kästner, E. Reithmeier, P. Sieczkarek, A. Tekkaya</i>	09:50 – 10:10	SNIP: Smile - Neutral facial display Intensity Predictor <i>K. Nurzynska, B. Smolka</i>
10:10 – 10:30	Navigation of Robotics Platform Using Advanced Image Processing Navigation Methods <i>L. Beran, P. Chmelar, L. Rejcek</i>	10:10 – 10:30	Towards a Robust Patch Based Multi-View Stereo Technique for Textureless and Occluded 3D Reconstruction <i>B. Haines, L. Bai</i>

10:30 – 11:00

Coffee Break

11:00 – 12:20

Oral Presentations

Room: Adeje		Room: Caleta	
Chairpersons: António J. R. Neves, Eduard Rohan		Chairpersons: Bogdan Smółka, Félix Paulano	
ORAL XIII		ORAL XIV	
11:00 – 11:20	CT based identification problem for the multicompartiment model of blood perfusion <i>E. Rohan, V. Lukés, J. Brášnová</i>	11:00 – 11:20	Surface reconstruction of bone fragments: a comparative study <i>F. Paulano, J.J. Jiménez, J.R. Jiménez</i>
11:20 – 11:40	A study on discrimination of SIFT feature applied to binary images <i>I. Setitra, S. Larabi</i>	11:20 – 11:40	Improving Deep Neural Networks Classification by Preprocessing Images <i>H. Erdmann, F.T. Ito, D. Takabayashi, D.N. dos Santos</i>
11:40 – 12:00	Time-constrained Detection of Colored Objects on Raw Bayer Data <i>A.J.R. Neves, A. Trifan, J.L. Azevedo</i>	11:40 – 12:00	An integrated two Time-of-Flight camera system to determine knee flexion movement: comparison with standard motion analysis system <i>E. Veron-Tocquet, V. Burdin, J. Savéan, J. Leboucher, O. Rémy-Néris</i>
12:00 – 12:20	Image Scanning Techniques for Speeded-Up Color Object Detection <i>A. Trifan, A.J.R. Neves, B. Cunha</i>	12:00 – 12:20	Anthropomorphic robot forefinger virtually simulated <i>H.J. Rabiela, B.V. González, G.D.A. Miranda</i>

12:30 – 12:45

Closing Session

Room: Adeje

Local

H10 Costa Adeje Palace



H10 Costa Adeje Palace

Playa La Enramada, La Caleta

E-38679-Costa Adeje-Tenerife

Phone: (34) 922 71 41 71

Email: h10.costa.adeje.palace@h10hotels.com

url: www.h10hotels.com/en/tenerife-hotels/h10-costa-adeje-palace

Location

The hotel is situated in the south of Tenerife on the Costa Adeje
27 Km from Tenerife Sur Airport
85 Km from Tenerife Norte Airport
84 Km from Santa Cruz de Tenerife

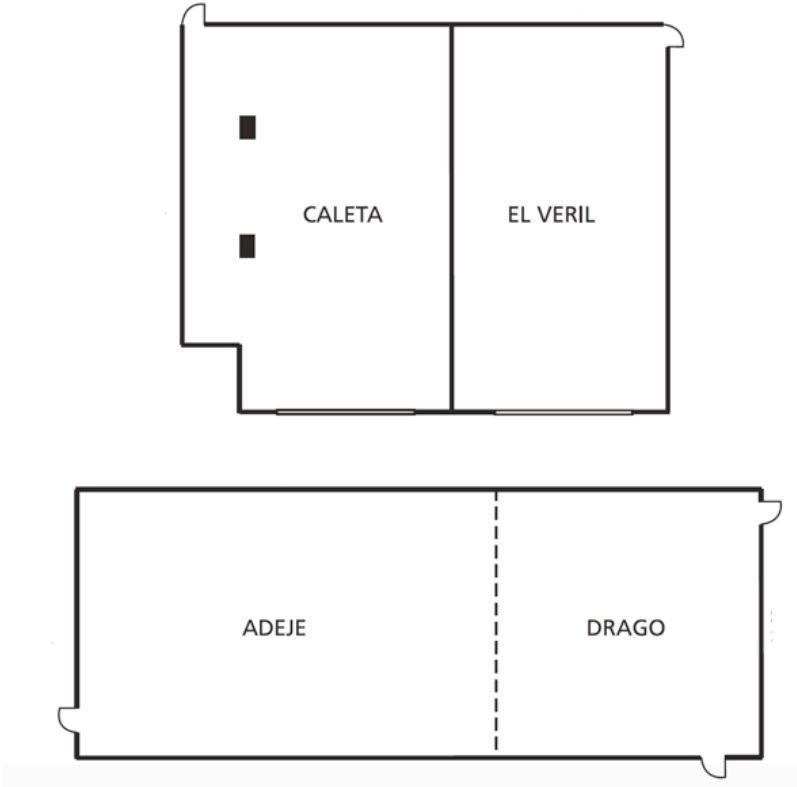


Coordinates

-16° 44' 58.09"

+28° 5' 49.54"

Rooms:



SOCIAL PROGRAMME SCHEDULE

Monday, October 19

19h00 – 19h45: Welcome Port of Honour

Tuesday, October 20

19h30 – Farewell Dinner

