

Technical Sessions

Technical Session 1 - Spillways and Weirs

Thursday, 7th May 2015 - 11:40 – 13:00

Chair: Jorge Matos

11:40 – 12:00

Pressure and velocity on an ogee spillway crest operating at high head ratio: experimental measurements and validation.

Y. Peltier, B. Dewals, P. Archambeau, M. Pirotton & S. Erpicum

12:00 – 12:20

Cançada dam complementary spillway. Design, hydraulic model and ongoing works.

A. Muralha, L. Couto, T. Alvarez, R. Sardinha, M. Oliveira & J. Dias da Silva

12:20 – 12:40

Interpretation of near bed RMS velocity & shear stress in the approach flow of Piano Key Weir (PKW).

H. Tiwari & N. Sharma

12:40 – 13:00

Measuring void fraction of a stepped spillway with non-intrusive methods using different image resolutions.

P. Bühler, J. Leandro, D. B. Bung, P. Lopes & R.F.Carvalho

Technical Session 2 - Intakes and Gates & Hydraulic Jumps and Stilling Basins

Thursday, 7th May 2015 - 14:00 – 15:20

Chair: Sébastien Erpicum

14:00 – 14:20

Cavitation around the butterfly valves of the new lock of Lanaye (Belgium): estimation and Remedy.

C. Savary, R. Durvaux, F. Grimée & Z. Li

14:20 – 14:40

Assessment of a numerical method to forecast vortices with a scaled model.

G. Guyot, B. Huber & A. Pittion-Rossillon

14:40 – 15:00

Length of submerged jump and B-jump.

M. Ishikawa¹, M. Takahashi, Y. Yasuda, & I. Ohtsu

15:00 – 15:20

Roller lengths, sequent depths, surface profiles for predesign of dissipation basins.

H.E. Schulz, A.L.A. Simões & J.D. Nóbrega

Technical Session 3 - Coastal Scour

Thursday, 7th May 2015 - 15:20 – 16:00

Chair: Rita Carvalho

15:20 – 15:40

Flume measurements of the wake of two model horizontal-axis tidal stream turbines.

S.M. Simmons, S.J. McLelland, D.R. Parsons & B.J. Murphy L.B. Jordan & L. Vybulkova

15:40 – 16:00

Application of a new approach for modeling of coastal erosion in Arctic areas.

A. Reda, W. Sulisz, D. Majewski, M. Paprota, & M. Szmytkiewicz

Technical Session 4 - Scour Protection Structures

Friday, 8th May 2015 - 11:40 – 13:00

Chair: Pedro Lopes

11:40 – 12:00

Time of scour at elliptical guide banks.

B. Gjunsburgs & O. Lauva

12:00 – 12:20

Comparative research of interlocked-carpet block ramp (ICBR) made of natural stone with rapid hydraulic structure (RHS) of Peterka type.

A. Radecki-Pawlik & K. Plesinski

12:20 – 12:40

Effect of un-steady flow conditions on scour features at stepped gabion weirs.

S. Pagliara & M. Palermo

12:40 – 13:00

Adaptive wavelet-based finite volume shallow water solver.

D. A. Haleem, G. Kesserwani & D. Caviedes-Voullième

Technical Session 5 - Breakwaters and Seawalls

Friday, 8th May 2015 -

14:00 – 15:20

Chair: Stefano Pagliara

14:00 – 14:20

Modelling of an extreme wave attack on a seawall.

M. Paprota, R. Staroszczyk & W. Sulisz

14:20 – 14:40

Rubble-mound breakwater armour units displacement analysis by means of digital images processing methods in scale models.

J.M. Courela, R.F. Carvalho, R. Lemos, J. Fortes & J. Leandro

14:40 – 15:00

Development of an integrated tool for numerical modelling of OWC-WECs in vertical Breakwaters.

M.T. Reis, E. Didier, J. Dias, A. Mendonça, J.M.P. Conde, M.G. Neves, C.J.E.M. Fortes & P.R.F. Teixeira

15:00 – 15:20

Influence of coastal structures in velocity fields and wave height.

R.F. Carvalho, C.J.E.M. Fortes, M. Castro

Technical Session 6 - Alteration of regimes

Friday, 8th May 2015 - 15:20 – 16:00

Chair: Ricardo Martins

15:20 – 15:40

Alternation of channel river pattern reach and its hydraulic and hydrodynamics consequences – the Flinta river example.

T. Kaluza, A. Radecki-Pawlik, K. Plesinski, N. Walczak & K. Szoszkiewicz

15:40 – 16:00

Alteration of the river regime downstream small hydropower schemes.

Exploratory analysis of the effects on the vegetation of the river corridor.

M. Mendonça, M.M. Portela & F.C. Aguiar