CIMS2020 GENERAL PROGRAMME

July, 12 2021 (Monday)

11:00-11:45 Opening ceremony

12:00-12:50 Keynote Lecture 1 prof. Nuno Silvestre

12:50-14:30 Lunch

session I - Buckling of Cold Formed Structures I & Plate Structures

14:30-14:50 (local time 9:30) Batista E., Matsubara G.: General formulation for the strength of thin-walled cold-formed steel columns under buckling modes interaction


15:10-15:30 Becque J.: Linking the von Karman equations to the design of steel plates

15:30-15:50 Nedelcu M.: Semi-analytical solutions for the compressed thin plate with large displacements

15:50-16:10 break (tea, coffee)

session II - Buckling of TWCFSS

16:10-16:30 Haffar M.Z., Adany S.: Analytical solutions for the GNI analysis for lateral-torsional buckling of thin-walled beams with doubly-symmetric and mono-symmetric cross-sections

16:30-16:50 Hoang T., Adany S.: New transverse extension modes for the constrained finite strip analysis of thin-walled members

16:50-17:10 Dubina D., Czechowski L., Kotelko M., Ungureanu D.V.: Some aspects of buckling behavior of channel section members under eccentric compression

17:10-17:30 Bianco M.J., Habtemariam A.K., Kônke C., Tartaglione F., Zabel V.: Alternative complementary shear and transversal elongation modes in Generalized Beam Theory (GBT) for thin-walled circular cross-sections

17:30-17:50 Pawlak A., Paczos P.: Experimental investigation of compressed beams/columns using optical methods

17:50-18:10 McCann F., Rossi F.: Investigating local buckling in highly slender elliptical hollow sections through analysis of 3D-printed analogues

18:10-18:30 Kolakowski Z., Teter A.: Coupled buckling of hybrid thin-walled channel sections under compression in the elastic range

18:30-20:30 Welcome reception
July 13, 2021 (Tuesday)

08:30-09:20 (local time 16:30)  Keynote Lecture 2 prof. Kim Rasmussen

09:20-09:40  break (tea, coffee)

09:40-10:30 (local time 10:40)  Keynote Lecture 3 prof. Dan Dubina

**session III - Energy Saving Structures**

10:30-10:50 (local time 18:30)  Hu Y., Khezri M., Rasmussen K.J.R.: Numerical simulation and verification of adaptive shading modules with buckling as the driver for functionality

10:50-11:10 (local time 18:50)  Khezri M., Rasmussen K.J.R.: Shading module with buckling as driver for shape morphing


11:40-12:10  break (tea, coffee)

**session IV - Buckling of Cold Formed Structures II**

12:10-12:30 (local time 19:10)  Kobashi T., Kitaoka S.: Evaluation of the post-maximum strength behavior of the lipped-C channel column member under compression

12:30-12:50 (local time 16:00)  Kalam Aswathy K.C., Anil Kumar M.V.: Interaction of stiffened and unstiffened element buckling modes in CFS plain channel compression members

12:50-14:20  lunch

13:30-14:15  On-line Meeting of the Scientific Committee
14:20-15:00 (local time 08:20)  *Keynote Lecture 4 prof. Ben Schafer*

**session V - Dynamic Buckling of Energy Absorbers**

15:00-15:20  Jafarzadech Aghdam N., Schroeder K.U.: Dynamic buckling of crash boxes under an impact load


15:40-16:00  *break (tea, coffee)*

**session VI - Multi-Layered Structures**

16:00-16:20  Timmers R.: Influence of the imperfection shapes on the collapse mechanisms of stiffened plates with class 4 trapezoidal stiffeners

16:20-16:40  Pawlus D.: Buckling sensitivity of three-layered annular plates in temperature field on the rate of imperfection

16:40-17:00  Magnucki K., Magnucka-Blandzi E.: Dynamic stability of a three-layer beam – Generalization of the sandwich structures theory

17:00-17:20  *break (tea, coffee)*

**session VII / Design Methods**


17:40-18:00  Vaszilievits-Sömjén B.: Efficient application of the reduced stress method for built-up I sections

18:00-18:20  Kettler M., Unterweger H.: Design proposal for bolted angle members in compression
July 14, 2021 (Wednesday)

08:30-09:20 (local time 14:30)  Keynote Lecture 5 prof. Ben Young

  session VIII / Buckling of Cold Formed Structures III

09:20-09:40 (local time 15:20)  He Jun, Young B.: Tests of cold-formed steel built-up sections with web holes subjected to web crippling

09:40-10:00 (local time 15:40)  Qiu-Yun Li, Young B.: Flexural behaviour of cold-formed steel built-up section members

10:00-10:20 (local time 11:00)  Nagy Z., Kelemen A., Nedelcu M.: The influence on portal frame buckling of different cladding systems- a comparative numerical study considering stressed skin effect

10:20-10:50  break (tea, coffee)

  session IX - Non-linear Analysis of Structures

10:50-11:10  Magisano D., Liguori F., Leonetti L., Madeo A., Garcea G.: A reduced model for nonlinear analysis and design of thin-walled structures prone to multi-modal buckling

11:10-11:30  Magisano D., Liguori F., Leonetti L., Garcea G.: A robust and efficient iterative strategy for nonlinear analysis of structures subjected to buckling

11:30-11:50  Mascolo I., Cutolo A., Esposito L., Guarracino F.: Buckling of circular rings: some issues related to the settings of finite elements analyses

11:50-12:10  Borkowski Ł.: Influence of damping effect on the dynamic response of plate

12:30-13:30  lunch

  session X - Buckling of Composites


13:50-14:10  Zaczyńska M., Mania R.J.: Dynamic buckling of fiber metal laminate structure

14:10-14:30  Czapski P., Kubiak T.: Influence of manufacturing process technology on buckling behavior of thin-walled, GFRP columns with a square cross-section

14:30-14:50  Banat D., Mania R.J.: Numerical and experimental post-buckling analysis of slender thin-walled GLARE members subjected to compressive loading

15:00-16:00  closing of the Conference