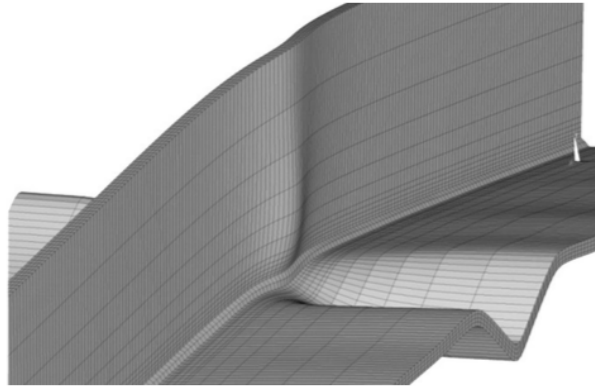




Professor Yi Liu



Local buckling of stiffener in post-ultimate load state

From: Liam Gannon and Yi Liu, “Effect of three-dimensional welding-induced residual stress and distortion fields on strength and behavior of flat-bar stiffened panels”, *Ships and Offshore Structures*, July 2012

See:

<https://www.dal.ca/faculty/engineering/civil-resource/faculty-staff/our-faculty/professors/yi-liu.html>

https://www.researchgate.net/profile/Yi_Liu181

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Teaching and Research Interests:

Dr. Liu's teaching interests include courses related to structural analysis and design. Areas of research include numerical modeling and experimental investigation of the behavior and strength of structural elements and systems. Dr. Liu's main research interests involve steel, masonry and composite structures.

Selected Publications:

Yi Liu and Sabine Chantel, “Experimental study of steel single unequal-leg angles under eccentric compression”, *Journal of Constructional Steel Research*, June 2011

Liam Gannon and Yi Liu, “Effect of three-dimensional welding-induced residual stress and distortion fields on strength and behavior of flat-bar stiffened panels”, *Ships and Offshore Structures*, July 2012

Liam Gannon, Yi Liu, Neil Pegg and Malcolm J. Smith, “Effect of welding-induced residual stress and distortion on ship hull girder ultimate strength”, *Marine Structures*, Vol. 28, No. 1, pp 25-49, August 2012

Vahid Farajkhah and Yi Liu, “Effect of time-dependent material properties on the welding-induced residual stress and distortion fields of aluminum stiffened plates”, *Proceedings of the Canadian Society for Civil Engineering*, Vol. 2, January 2015

Liam Gannon and Yi Liu, “Nonlinear collapse analysis of stiffened plates considering welding-induced residual stress and distortion”, *Ships and Offshore Structures*, February 2015

Ahmad Abou-zidan and Yi Liu, “Numerical study of unstiffened extended shear tab connections”, *Journal of Constructional Steel Research*, April 2015

Chris Mantha, Xi Chen and Yi Liu, “Lateral torsional buckling of steel twin plate girder systems with torsional braces only”, *Canadian Journal of Civil Engineering*, December 2015

Vahid Farajkhah, Yi Liu and Liam Gannon, “Finite element study of 3D simulated welding effect in aluminum

plates, *Ships and Offshore Structures*, January 2016

Vahid Farajkhah and Yi Liu, "Effect of fabrication methods on the ultimate strength of aluminum hull girders", *Ocean Engineering*, Vol. 114, pp 269-279, March 2016

Vahid Farajkhah and Yi Liu, "Effect of clamping area and welding speed on the friction stir welding-induced residual stresses", *International Journal of Advanced Manufacturing Technology*, August 2016

Yahid Farajkhah and Yi Liu, "Effect of metal inert gas welding on the behavior and strength of aluminum stiffened plates", *Marine Structures*, Vol. 50, pp 95-110, November 2016