## Shell Buckling

Simos Gerasimidis $^{*\dagger 1}$  and Pedro  $\mathrm{Reis}^2$ 

<sup>1</sup>University of Massachusetts, Amherst (UMass Amherst) – 130 Natural Resources Road Amherst, MA 01003, United States

<sup>2</sup>Flexible Structures Laboratory, Institute of Mechanical Engineering, École Polytechnique Fédérale de Lausanne (EPFL) – EPFL STI IGM FLEXLAB MED 0 1226 (Batiment MED) Station 9 CH-1015 Lausanne, Switzerland

## Abstract

The arena of shell buckling received great attention after the monumental development of a general theory on elastic buckling and post-buckling behavior by Koiter in 1945. For more than three decades, the literature on shell buckling flourished with investigations on imperfections sensitivity, minimum buckling loads and instability modes. Following this intense progress, the field entered a period of idleness, up until very recently. Today, 74 years after Koiter's presentation, there is a strong resurgence of activity in studying the mechanics of shell buckling which is observed worldwide by numerous research efforts. With the rapid progress in new materials and computational and experimental technology, a breadth of exciting new ideas has revitalized the problem. This mini-symposium will provide a forum for discussing the most recent computational, theoretical and experimental findings in the area of shell buckling, as well as future research directions.

Keywords: Stability

<sup>\*</sup>Speaker

<sup>&</sup>lt;sup>†</sup>Corresponding author: sgerasimidis@umass.edu