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# Regularization of planar piecewise smooth two-folds

Kristian Kristiansen<sup>\*1</sup> and John Hogan<sup>†2</sup>

<sup>1</sup>Technical University of Denmark (DTU) – Anker Engelunds Vej 1 Building 101A 2800 Kgs. Lyngby, Denmark

<sup>2</sup>Department of Engineering Mathematics, University of Bristol (EMUOB) – Merchant Venturer’s Building, Woodland Road, Bristol BS8 1UB, United Kingdom

## Abstract

This talk will demonstrate the use of the blow up method of Krupa and Szmolyan to study the Sotomayor-Teixeira regularization of two-folds in planar piecewise smooth systems. We will describe the perturbation of associated limit cycles, pseudo-equilibria, and canard-like orbits connecting stable sliding with unstable sliding. We will also present results on how the regularization function can introduce additional bifurcation.

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\*Corresponding author: k.kristiansen@mat.dtu.dk

†Speaker