

# WORKSHOP ON SUBMANIFOLD THEORY AND GEOMETRIC ANALYSIS

UFSCAR, SÃO CARLOS, BRAZIL, AUGUST 05 – 09, 2019

TUESDAY- 16h - 16:50h -AUDITÓRIO DO DM

Francisco Fontenele

(UFF - Brazil)

Finding umbilics on open convex surfaces

ABSTRACT. By the Poincaré-Hopf theorem every ovaloid has at least one umbilic. In this paper we extend this result to the more general case of complete positively curved surfaces in  $\mathbb{R}^3$  whose shape operator  $A$  satisfies  $\inf |A| > 0$  and  $\sup |\nabla A| < \infty$ . This is a joint work with Frederico Xavier (University of Notre Dame - USA).

Support:



Organizers:

