

New Advances in the Study of Generalized Willmore Surfaces

Magdalena Toda

Texas Tech University, Department of Mathematics and Statistics, USA
magda.toda@ttu.edu

ABSTRACT

This is a report regarding our newest results on Generalized Willmore Surfaces and their applications, in terms of their analytic characterization and constructive methods. The technical setting employed lies at the intersection between differential geometry, Cartan frame theory, variational calculus and numerical methods.