

1106-K1-61

Bogdan D. Suceava* (bsuceava@fullerton.edu), 800 N State College Blvd, 154 McCarthy Hall, Department of Mathematics CSUF, Fullerton, CA 92834-6850. *New Curvature Invariants: a Research Topic Suitable to Undergraduate Students.*

In the last two decades, there have been important advances in the study of new curvature invariants. A natural question is to investigate which fundamental algebraic inequalities yield meaningful consequences in terms of curvature. This research topic is suitable to undergraduate students familiar with fundamental inequalities with real numbers; ideally, the students' background should include a one semester long course on the differential geometry of curves and surfaces. We will show how this idea produced publishable works, e.g. 'New Curvature Inequalities for Hypersurfaces in the Euclidean Ambient Space', by C. T. R. Conley, R. Etnyre, B. Gardener, L.H. Odom, and B.D. Suceava, *Taiwanese J. Math.*, 17 (2013), 885-895. (Received June 06, 2014)