A Family of Compact Algebraic Strongly Pseudoconvex Hypersurfaces Which Can Not Be Locally Embedded into a Sphere of Any Dimension

Xiojun Huang Rutgers

Abstract

The materials of this talk are based on three joint papers, one with D. Zaitsev (Math. Z.), one with X. Li and Ming Xiao (IMRN) and one with Ming Xiao. I will describe the construction of a family of compact strongly pseudoconvex algebraic hypersurfaces which can not be holomorphically embedded into any sphere. This gave a negative answer to a long standing falklore conjecture in CR geometry.