Regularity and irregularity of CR maps

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Minicourse Abstract

This minicourse will give insights into the recent developments in the theory for regularity of CR maps we have developed in different settings over the last couple of years. In a nutshell, our approach is based on general structural properties of the nonlinear equations satisfied by a CR map on a minimal CR manifold, which force the existence of (formal) varieties in the image of the map.

The course will cover:

- 1. Reflection identities and prolongation
- 2. Reflection identities and regularity
- 3. Forcing varieties through irregularity
- 4. Open questions and problems