

Wednesday July 11, 4:10-5:00

Fields Institute, Room 230

Fields Institute Colloquium in Applied Mathematics

Momentum Maps, Image Analysis & Solitons

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Abstract: This survey talk discusses some opportunities for applied mathematics and, in particular, for geometric mechanics in the problem of registration of images, e.g., comparison of planar closed curves. It turns out that many aspects of geometric mechanics apply in this problem, including soliton theory and momentum maps. Much of this talk is based on work done with Jerry Marsden (1942 - 2010). Some trade secrets will be revealed.