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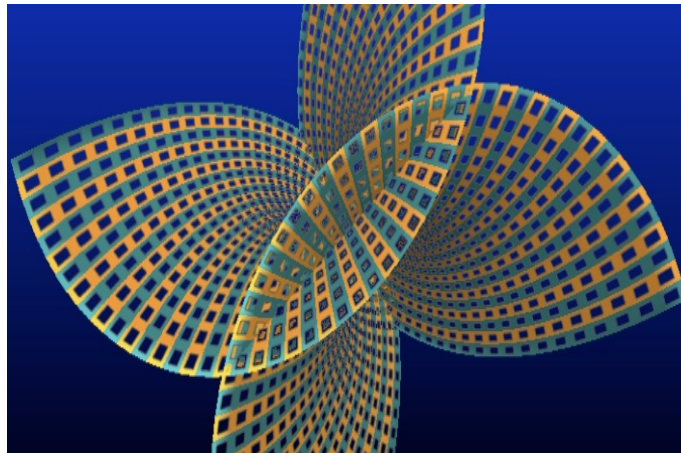
## *Undergraduate Math and Physics Seminar*

# Contact Geometry: A 21st Century Geometry

**Bahar Acu**

*Graduate Student, University of Southern California*

**Abstract:** Contact Geometry, also known as the 21st century geometry, is the study of a geometric structure on a smooth manifold given by a certain type of hyperplane distribution. It has been seen to underlie many physical phenomena and is motivated by mathematical formalism of classical mechanics. In the first part of the talk, we will introduce the basic definitions, examples and facts in differential geometry concerning contact geometry, i.e., vocabulary needed for the second part of the talk. In the second part, we will talk about its relation to "open book decompositions" which is a certain decomposition of a topological manifold into bunch of other manifolds (i.e., its pages and binding) and also discuss related results.



*When:* Wednesday, September 23, 2015, 4:30-5:20 pm

*Where:* CSUCI, Del Norte 1530

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