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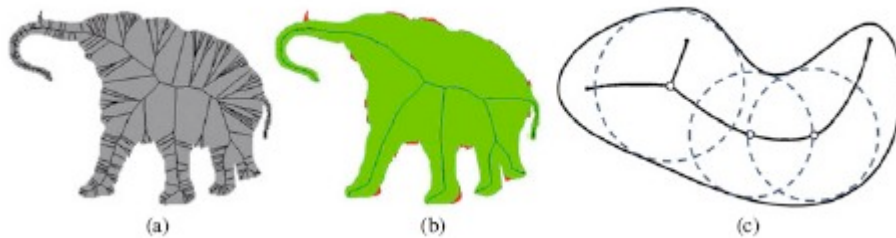
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## *Undergraduate Math and Physics Seminar*

# Modeling Shapes with Skeletal Fragments

**Dr. Kathryn Leonard**  
*CSUCI*

**Abstract:** Despite recent progress in image recognition, recognizing the shapes of objects in images continues to challenge researchers. Equally difficult are the tasks of decomposing a shape into its component parts, and determining which of those parts are similar to each other or to parts in another shape. We present a skeletal model for shapes, the Blum medial axis, and show how functions defined on the Blum axis can help with all three tasks. We also present results from a massive shape decomposition user study, showing how our automated shape decomposition compares to the human shape decomposition captured by the user study.



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

*Where:* CSUCI, Del Norte 1530

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