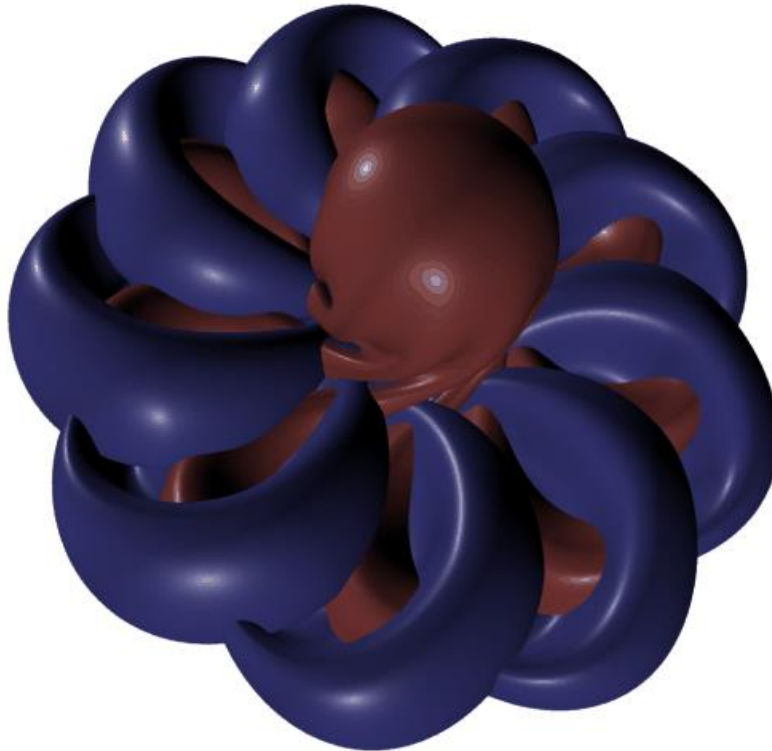


# The SUMO Speaker Series for Undergraduates

Thursday, October 9th  
4:15-5:05, room 380C  
(Food Provided)



## The Wiggle is an H-Principle Professor Daniel Alvarez-Gavela

### **Abstract:**

Some problems in geometry are rigid. Some are flexible. In the latter case we say that an h-principle holds. An example is given by the San Francisco biker who tries to cycle straight from Market Street to Golden Gate Park without ever going uphill. The flexible solution to this problem is given by "The Wiggle", an SF bike path which zig-zags up the hills, keeping the slope (almost) flat. We'll use this example to explain what flexibility means and why it is such an important concept. If we have time we might be able to use it to turn a sphere inside out (but not a circle).

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