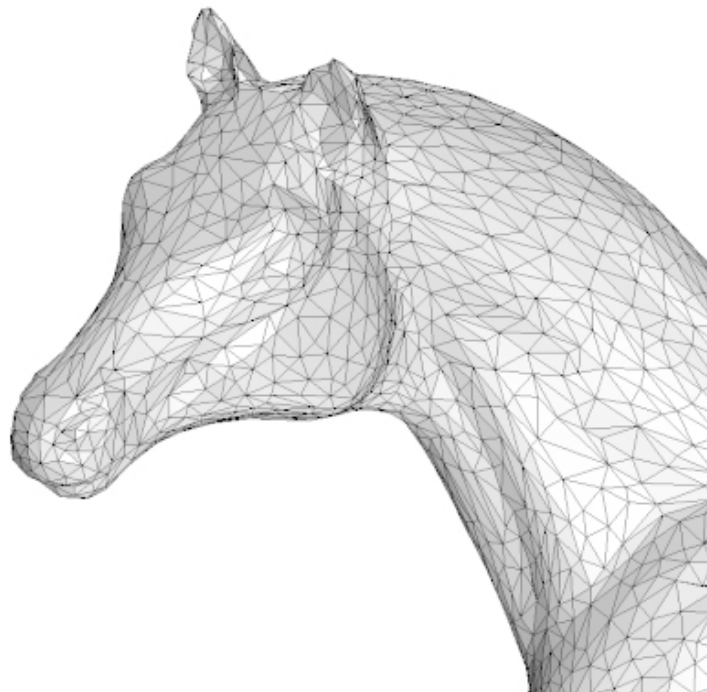


# The SUMO Speaker Series for Undergraduates

*(food from Pizza Chicago)*  
Wednesday, May 5  
4:40-5:30, room 380C

## Simplicial Complexes

Prof. Soren Galatius



Abstract: Many interesting spaces can be "built" out of simpler pieces. For example, a circle can be built by starting with three points, and then attaching three (bent) lines between each pair. A simplicial complex is a space built out of points, lines, triangles, tetrahedra, and their higher-dimensional analogues. Many interesting spaces turn out to be simplicial complexes. I will give examples of simplicial complexes and explain what they are good for. In some examples (like the circle) we already know the space in some other description; describing them as simplicial complexes can be useful for studying their properties. In other examples, simplicial complexes are used to "manufacture" spaces with certain properties.

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