Laplace-Beltrami operators non-planar polygonal meshes

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Discrete Laplace-Beltrami operators are central to geometry processing, with applications ranging from mean-curvature estimation and smoothing to distance calculation and bending simulation. While many discretization approaches are well understood on triangulated or even planar polygonal meshes, extending them to non-planar polygonal faces remains challenging due to the non-constant normal field. This talk presents and compares several approaches to discretize the Laplacian on non-planar polygonal meshes from a geometry-processing perspective.

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