



## Mathematics and CS Seminar

# **GeomTop Seminar: [30 min incl Q&A] Triangulating submanifolds: An elementary and quantified version of Whitney's method**

**Mathijs WINTRAECKEN**

Host: Herbert Edelsbrunner

The first insightful geometric and constructive proof of the existence of a triangulation of any smooth manifold was given by Hassler Whitney. We quantize Whitney's construction (in terms of the reach of the manifold) to prove the existence of a triangulation for any  $C^2$  manifold, so that we get an algorithm with explicit bounds. We also give a new elementary proof, which is completely geometric. Joint work with Jean-Daniel Boissonnat and Siargey Kachanovich.

**Wednesday, June 19, 2019 01:30pm - 02:45pm**

Mondi Seminar Room 3, Central Building



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

Please find a schedule of the ISTA Shuttle on our webpage:

<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.