

**Technion-Israel Institute of Technology**  
**Computer Science Department**  
**Center for Graphics and Geometric Computing**



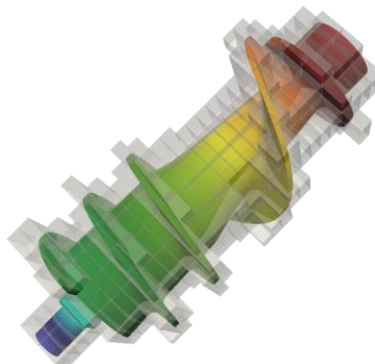
## **CGGC Seminar**

**Benjamin Wassermann**

Computer Science Department, Technical University of Munich

Geometry treatment in fictitious domain methods

Fictitious domain methods are an elegant way to circumvent a tedious discretization process, mostly meshing. The core idea is to embed the geometrically complex model into a fictitious domain, which has zero stiffness assigned. The complexity of the model is then recovered on the integration level, where the only information required from the model is an unambiguous, reliable point membership classification (PMC) on the integration points. This point membership classification can be easily carried out for B-Rep models using e.g. ray-casting. For other models like CSG, point clouds, or flawed B-Rep models these PMC tests can, or must be adapted accordingly.



**The lecture will be held on Sunday, 24.03.2019, at 13:30, Taub 401**

**הזמנה זו מהווה אישור כניסה עם רכב לטכניון**