In this seminar I will discuss surface diffusion as a prototype for a geometric evolution equation. The main focus will be on the numerical approximation of this flow, and more generally on numerical approaches for moving interface problems. Here I will consider both front tracking methods and phase field methods. Given that in Materials Science an anisotropic surface energy often plays an important role, I will extend the introduced ideas from the isotropic to the anisotropic setting. Several numerical simulations will be presented, including for extensions of the described techniques to the modelling of snow crystal growth.

giovedì 12 novembre 16:00
Per partecipare all'evento, contattare lo Staff di Dipartimento (dept.math@unitn.it).