Mathematical modeling of the microtubule dynamic instabilities. Florence Hubert, Université de Marseille

The aim of our group is to design some pertinent mathematical /computational models of the pharmacological e ffects of microtubule-targeted drugs, which are powerful anti-mitotic drugs used in human cancers. Those drugs induce important perturbations on microtubule dynamic instabilities. As these instabilities play a key role in cancer progression: i.e cell proliferation/division and cell migration, any contribution on the comprehension of their effects could be helpful.

We will focus in this talk in the modeling of the notion of aging of microtubules.