

21st **May 2012 - 10:00 am** DESY building 49 – Room 108

Jean-René Alattia

Swiss Federal Institute of Technology - Lausanne (EPFL)

Brain Mind Institute

The Alzheimer's ticking clock: Determining the structure of gamma-secretase to accelerate drug development.

Detailed understanding of gamma-secretase structure is crucially needed to elucidate its unique properties of intramembrane protein cleavage, and to design therapeutic compounds for safe treatment of Alzheimer's disease. Gamma-secretase is a challenging enzyme complex composed of four membrane proteins, and the scarcity of its supply has been a major obstacle. The efforts to make gamma-secretase amenable for structure determination will be presented, as well as intrinsic data relevant to macromolecular crystallography.

Host: Francesco Stellato - Coherent Imaging Division