



# AIM &Le service d'Astrophysique CEA/DSM/Irfu



### THE EARLY ASSEMBLY OF SUPERMASSIVE BLACKHOLE

#### E.ROSSI

(Leiden Univ., Leiden, Pays-Bas)

Supermassive black holes seem to be ubiquitous in galaxies. But How did they form? In this talk, I will review the main current channels for supermassive black hole seed formation, with particular focus on the mass estimates. These estimates, based on theoretical models and numerical simulations, remain quite uncertain, but there has been a trend toward lower values in recent works. New merger tree calculations are needed to understand if this is worrisome to account for bright quasars at z>6. Certainly, we cannot relax the requirement of very efficient growth at early stages.

#### 22 novembre 2012

## 11h00 Salle Galilée bât 713 C - Orme des Merisiers





Un café sera servi 15 mn avant le séminaire

Pascale Chavegrand - secrétariat Irfu/SAp 01.69.08.78.27 chavegrand@cea.fr