Service d'Astrophysique SÉMINAIRE

Vendredi 17 juin 11h00

CEA Saclay, Orme des Merisiers Bat 713, salle de séminaires Galilée

GRAVITATIONAL LENSING: ENTERING THE PRECISION ERA

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Current and future Wide-Field Imaging Surveys allow us to use gravitational lensing for high-precision measurements of cosmological parameters and to study galaxy and cluster properties in great detail . To fully exploit the potential of current ground- and space-based imaging data we need to develop and to apply novel and fully automatic analysis techniques. This concerns the measurement of object properties such as photometry and shape parameters below the percent level and to establish a robust data-flow system in the Terabyte regime. In my presentation I will summarise the status of image-processing techniques in the context of the CFHTLenS (CFHT Lensing Survey) project. I will show first, preliminary science results from the application of our analysis procedures to the Wide-Component of the CFHTLS.