## Observation of X-ray Novae with INTEGRAL

A. Goldwurm, P. Goldoni, P. Laurent, F. Lebrun (SAp/DAPNIA/CEA-Saclay)

A fundamental part of the observing program of the ESA gamma-ray INTEGRAL mission to be launch in 2001, will include a complete survey of the Galactic Plane performed in weekly scans (GPS) and the deep exposure of Galactic Center regions (GCDE). The INTE-GRAL/GPS and GCDE will provide a regular monitoring of galactic high energy variable sources and will lead to the discovery of a number of bright and faint transient sources. X-ray Novae will be a prime target of the GPS and GCDE INTEGRAL surveys and of follow up TOO observations of INTEGRAL.

The fine coded mask imaging system of the hard X-ray/soft gamma-ray (15 keV-10 MeV) IBIS telescope onboard INTEGRAL is particularly suited to the study of these hard X-ray sources, often associated to black holes. IBIS will be able to position most these sources with a great accuracy (<1') even from GPS data, thereby allowing prompt optical identification and ground observations to be carried out. Follow up pointed IBIS observations will instead provide detailed spectra in a wide energy band, and high resolution timing informations, to be used to search for gamma-ray lines (of Nova Musca type) and for spectral/timing signatures of radiation mechanism in black hole accreting binaries. In addition IBIS data taken during the GCDE survey will allow to search for faint and distant X-ray Novae of the galactic bulge, which are not easily detected by conventional all-sky monitors but which the GRANAT/SIGMA experience has shown to be an important population of transient sources.

We discuss here the overall strategy which could be implemented in the INTEGRAL mission for detailed study of X-ray Novae, in particular presenting realistic simulations of X-ray Novae observations with the IBIS telescope, but also considering contributions from the other INTEGRAL instruments.