

**OBSERVATION OF THE CRAB PULSAR WITH BEPPoSAX: PHASE RESOLVED SPECTROSCOPY AND STUDY OF THE PULSAR PROFILE.**

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The Crab Pulsar(PSR 0531+21) was observed by the four Narrow Field Instruments on board the Italian-Dutch satellite BeppoSAX on August and September 1996, during the Science Verification Phase. The fine time resolution (15  $\mu$ s) and the high statistic of the data provided phase histogram of very good quality, well suited for phase resolved spectroscopy over the entire energy band (0.1-300 keV) covered by BeppoSAX payload. In this contribution we present preliminary results of the spectra distribution of the peaks and the inter peak region. Moreover, we also carried out a detailed analysis of the P1 shape and the behaviour of the P2/P1 ratio with the energy.