
”Probing the jet structure: highlights of the observing campaign of the XTE J1550-564 large-scale jets”

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Abstract

The large-scale jets of XTE J1550-564 represent an unique laboratory to investigate the physics of microquasars’ jets and their interaction with the interstellar medium. In this talk, I will present the results of the multi-frequency campaign of observations which probed the inner structure of the western jet of XTE J1550-564 in 2001-2003. The complex, evolving morphology of the jet in X-rays, the detection of polarized radio emission and the chromatic decay of the broad-band emission give indications on how the particles are accelerated and energy is dissipated at large distances from the black hole. I will discuss our findings in relation to the radiative and dynamical models proposed for this system and the similarities with other microquasars’ jets, such as H 1743-322. Finally, I will outline the perspectives for the study of this class of jets with the incoming observing facilities.

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