

Gaia Fireworks: the impact of Gaia on Eruptive Accretion and the crucial role of NIR-Gaia

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The accretion from the circumstellar disk onto the forming star is supposed to be the fundamental process which regulates stellar mass gaining. A way to investigate the accretion process is to study light curves variability, in particular the strong changes in light curves (2-5 mag) that define eruptive young stars as FUors and EXors. These objects experience strong outbursts by which they collect up to $10^4 M_{\text{sun}}/\text{year}$. Unfortunately, only less than 50 Fuors/Exors are known. Recently, thanks to the Gaia Alert Program, further 12 objects have been classified as eruptive stars, and many more are going to be discovered. However, the accretion evolution is very difficult to study because young stars are veiled by the extinction of their dusty envelope and disk. As a consequence, only very bright young stars have been classified as eruptive accreting objects. In this talk I will summarise the outstanding impact of Gaia on eruptive accretion and I will show how NIR-Gaia will help this field of research.

Primary author: FIORELLINO, Eleonora (Istituto Nazionale di Astrofisica (INAF))

Co-authors: Dr KOSPAL, Agnes (Konkoly Observatory, Budapest); Dr ABRAHAM, Peter (Konkoly Observatory, Budapest); Dr NAGY, Zsofia (Konkoly Observatory, Budapest); Dr GIANNINI, Teresa (INAF - Osservatorio Astronomico di Monte Porzio Catone Roma); Dr CRUZ SAENZ DE MIERA, Fernando (IRAP)

Presenter: FIORELLINO, Eleonora (Istituto Nazionale di Astrofisica (INAF))