

The population of young stars in Orion A: X-rays and IR properties

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Abstract. Stars in the very early stages of their formation are characterized by strong infrared excess and X-ray emission. We present the results of the survey of Orion A in both the infrared and X-rays obtained with the *Spitzer* and *XMM/Newton* observatories. We study the spectral-energy distribution class of the young stellar object (YSO) population using infrared colors from 2MASS and *Spitzer* (IRAC and MIPS) and by means of X-ray fluxes, luminosities and plasma temperatures. We discuss clustering properties and spatial segregation among different infrared YSO classes to trace their formation history.

Keywords. stars: activity, stars: formation, open clusters and associations: individual (Orion A, L1641), X-rays: stars, infrared: stars

The full poster (in pdf format) is available at
<http://www.astro.iag.usp.br/~iaus266/Posters/pPillitteri.pdf>.