

Abstract Submitted
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An X-ray study of the massive star-forming cluster IRAS 20126+4104 VIRGINIE MONTES, New Mexico Tech — Massive star formation remains not well understood. The study of high-mass stars clusters is a key to explain massive star formation. Until recently it was believed that massive stars were only formed in dense molecular clouds leading to a substantial cluster. The study of 43 Galactic O-type stars by de Wit et al. (2005) showed that 4% of high-mass stars are formed outside of a cluster. A way to understand the role of clustering in massive star formation is to study and characterize the cluster in which they remain, using X-ray observations and multiwavelength data. X-ray is a good tracer to identify Young Stellar Objects that no longer have circumstellar disk to be detected in infrared or radio. The study allows us to determine number, age, mass, spectral type of stars, and contamination by associating X-ray observations with infrared, optical and radio data. Here, I present the Chandra X-ray study of the massive star-forming cluster IRAS 20126+4104. Discussion will include the work done on the X-ray data processing and model fitting, as well as the cluster properties combining infrared (2MASS), radio (EVLA) and optical (USNO) counterparts. Additionally, a cluster comparison done with M17 (Broos et al. 2007) will be presented.

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