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# Non-thermal emission from molecular clouds in the Galactic centre: Illumination vs cosmic rays.

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The molecular clouds at the Galactic centre (GC), Sgr B2 among others, emit strong Fe Kalpha photons as well as hard X-rays up to 100 keV. The origin of this emission has been the subject of a controversy. Irradiation by subrelativistic cosmic rays, electrons or protons, might account for the observed spectra, but it can also be the result of the illumination of the clouds by a past high luminosity period of X-ray sources in the GC (e.g. the supermassive black hole Sgr A*).* *We present here the results of monitoring observations of molecular clouds in the GC in X-rays and hard X-rays (XMM, Chandra, Integral) which show large variation of the emission over 10 years. This variation can not be accounted for by cosmic ray interpretations and supports the idea that Sgr A* was more active in the past. We discuss the possible level of emission due to cosmic ray irradiation in these regions.

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