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## Electron Proton Helium Instrument (EPHIN)

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The Chandra local particle radiation environment is monitored by the EPHIN detector. EPHIN consists of an array of 5 silicon detectors with anti-coincidence. The instrument is sensitive to electrons in the energy range 150 keV - 5 MeV, and protons/helium isotopes in the energy range 5 - 49 MeV/nucleon. The field of view is 83 degrees and the instrument is mounted near the HRMA. EPHIN data rates are monitored by the OBC, which activates commands to safe the ACIS and HRC instruments during periods of high radiation such as a solar flare.

The forerunner of the Chandra-EPHIN was flown on the SOHO satellite, SOHO-EPHIN.

The EPHIN instrument was built by the Institut fuer Experimentelle und Angewandte Physik Extraterrestrische Physik at the University of Kiel, Germany. Drs. Reinhold Muller-Mellin and Hoarst Kunow are the Co-Principal Investigators.

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<http://cxc.harvard.edu/ciao3.4/dictionary/ephin.html>  
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