

XMM-Newton and *INTEGRAL* observations of Soft Gamma-ray repeaters

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ABSTRACT: All the currently known Soft Gamma-ray Repeaters (SGRs) have now been observed with the *XMM-Newton* satellite, allowing us to describe with unprecedented details the soft X-ray emission from these objects. Moreover, the *INTEGRAL* satellite has allowed us to study for the first time the persistent hard (>20 keV) X-ray emission from the two brightest SGRs, SGR 1806-20 and SGR 1900+14.

In particular, SGR 1806-20, which displayed exceptional activity in the last few years, culminating with the Giant Flare of 2004 December 27, was observed six times by *XMM-Newton* and frequently monitored by *INTEGRAL* between 2003 and 2005, showing different spectral and intensity states. On the other hand, SGR 1900+14 and SGR 1627-41 are currently in a non-bursting state, allowing us to study the persistent emission of SGRs when the source activity level is low.

The results can be interpreted within the *magnetar* scenario and compared with those obtained for the Anomalous X-ray Pulsars, that are also believed to be *magnetars* and have been extensively observed with *XMM-Newton* and *INTEGRAL*.