Unveiling the AXP/SGR connection

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It was about 30 years ago that Soft Gamma-ray Repeaters (SGRs) were first discovered, while only 11 years ago Anomalous X-ray Pulsars (AXPs) were first recognised as a small distinct sample of neutron stars with respect to accreting X-ray pulsars and radio pulsars. Until few years ago the two samples have been considered two different manifestation of NSs. Recently they have shown similar behaviours and they are believed to possess extremally high magnetic fields, and are thus called "magnetars". In the latest years many new observational properties have been assessed, mainly thanks to the new generation instruments and to a large number of theoretical works. It is now evident that the multiwavelenght phenomenology of AXPs/SGRs is more complex then thought before. In this talk I will review the recentlyidentified properties of AXPs/SGRs at different wavelengths. A number of special cases will be also presented. Finally, a comparison with other classes of neutron stars will be briefly outlined.