Contribution ID: **25** Type: **not specified**

Supernova remnants hosting magentars

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Magnetars are regarded as the most magnetized neutron stars in the Universe. The study of them is essential to understand the origin of neutron star diversity. Among the 30 magnetars, around 10 are associated with supernova remnants (SNRs). Since the SNR and magnetar share a common progenitor and are born in a single explosion, studying them together will result in a better mutual understanding of these objects and their origin. I will talk about the SNRs hosting magnetars and show how the properties of these SNRs allow us to learn what progenitor stars and which kinds of explosion can create magnetars. I will also show the very detailed metal distributions in SNRs to understand the SN explosion (a)symmetries. According to SNR studies in recent years, magnetars are not necessarily made from very massive stars but originate from stars that span a large mass range. Their explosion energies also span a large range. These results challenge the popular dynamo scenario to create these Galactic magnetars but imply fossil field origin.