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**Fingerprints of the star-forming process in Solar System dynamics and chemistry.**

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Planet formation has long been taken as an isolated phenomenon. In recent years, however, it has become clear that it has to be treated as a part of star formation, and as such being embedded in clustered environments like, e.g. the Orion Nebula Cluster. Dynamical interaction, but also exchange of material between forming cluster members, likely play an important role for the outcome of planet formation. There is also significant evidence for the Solar System having formed in a dense star-forming environment comparable to the Orion Nebula Cluster.

Here we present the recent results of our research on dynamically influenced planet formation. Besides the possible role of dynamical perturbations on the proposed vortex-trapping mechanism, we also point out aspects of stellar and Solar chemistry that may be interpreted as fingerprints of a dynamical history of the Sun.

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