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# The Stellar Imager Vision of Solar and Stellar Activity

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Magnetic fields affect the evolution of structure in the Universe and drive solar and stellar activity which is a key to life's origin and survival. However, our understanding of how magnetic fields form, operate, and evolve is currently very limited, even for the nearest star, our Sun. The Stellar Imager - a UV-optical 0.1 milli-arcsecond (mas) imaging space interferometer - is a "Vision Mission" in the far-horizon NASA Roadmap that will enable unprecedented studies of magnetic field structures in a wide variety of galactic and extragalactic sources.

One of the key goals of the Stellar Imager is to understand the effects of stellar magnetic fields, the dynamos that generate them, and the internal structure and dynamics of the stars in which they exist.

The ultimate goal is to understand the long-term variations of the Solar dynamo, and achieve the best possible forecasting of solar/stellar activity and their impact on planetary climates and life.