

## **3D PRINT** BP Tau: A Young Star

BP Tau is a young star, less than 10 million years old compared to the 5 billion years for the age of our Sun. As with many stars its age, BP Tau is very active and prone to outbursts or flares. BP Tau is surrounded by a disk of material that may one day form planets (this is how the Earth and the rest of the Solar System formed.) The flares from BP Tau can reach this disk, forming hot loops of extended atmosphere. By studying this interaction, astronomers get a better understanding of how young stars - and potentially planets develop in these systems.

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## How to Create Your Own BP Tau





DOWNLOAD THE FILES In the 3D print of BP Tau, the disk of material resembles a large hockey puck with round, ringed, concave surfaces. At the heart of the puck is a small orb: the developing star. Shooting out of the orb are long, thin strands: the flares. Also emerging from the orb are petal-shaped blobs: the loops of extended atmosphere.

## **Printing Recommendations**

Printer Type: Suitable for FDM or SLA printers

Material: PLA recommended for standard prints; resin for high-detail models

Layer Height: 0.1 mm for best resolution

Supports: Required for overhanging elements such as magnetic loops or raised disk features Infill: 20%

You may wish to print the disk and magnetic arcs in different colors or materials to highlight the structure's components depending on your printer.

X-ray: NASA/CXC/SAO; Optical: PanSTARRS; Image Processing: NASA/CXC/SAO/N. Wolk 3D Print Credit: NASA/CXC/SAO/A. Jubett & N. Wolk, based on a model by S.Orlando