Documentation and report of Astrophysics with Artificial Intelligence(Astropy and AstroML) – UVES Spectroscopy with Astropy

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* **All the information is originated from ‘astropy.org’, ‘atsroml.org’, and ‘wikipedia.org’**

<1> The fundamental knowledge to utilize astropy and astroML for astrophysics

1. Accretion Disk

The accretion disk which is also known as circumstellar disk is the structure which is created by diffuse material in orbital motion around a massive central body. Typically, the central body is the star such as protostar, white dwarf, neutron star, or black hole and also there are imaginary stars such as black dwarf and blue dwarf.

1. Protostar

Mj = (9/4) × (1/2𝝅n)1/2 × (1/m2 ) × (kT/G)3/2

(n : the particle number density,

m : average mass of the gas particle in the interstellar cloud,

T : temperature of the gas)