

Figure 1: Schematic picture of an induced Compton scattering (ICS) experiment in laboratory. ICS is an interaction between the intense radiation and a rarefied plasma. ICS is expected to occur in some current laser facilities and then we can study an extreme plasma phenomenon around pulsars.

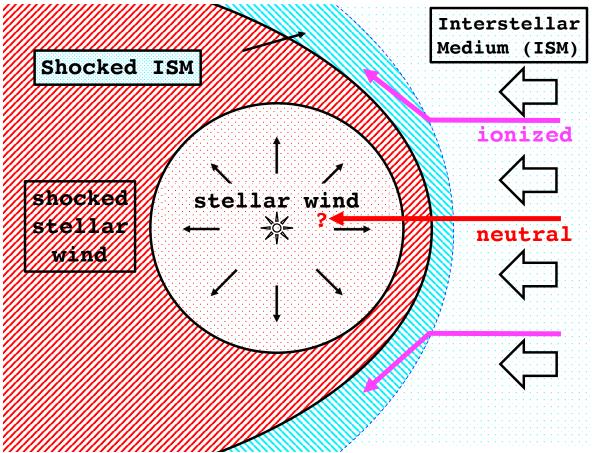


Figure 2: Schematic picture of a stellar magnetosphere. Stars in the Galaxy have relative motion to the interstellar medium (ISM). The stellar wind is fully ionized plasma, while the ISM is partially ionized plasma, i.e., a part of the ISM plasma does not interact with the stellar wind electromagnetically.