



Contribution ID: 18

Type: **not specified**

Anisotropies in winds and nebulae around Luminous Blue Variables.

Corrado Trigilio, Grazia Umana, Claudia Agliozzo, Carla Buemi, Filomena Bufano, Francesco Cavallaro, Adriano Ingallinera, Paolo Leto, Simone Riggi

Luminous Blue Variables (LBVs) are luminous, massive stars, which represent a crucial and relatively short phase of massive stars evolution between core-hydrogen burning O-type stars and helium burning Wolf-Rayet stars. They are characterized by "micro", "moderate" variability, leading to very strong mass loss. Giant eruptions, the so called SN impostors, even if rarely observed, are witnessed by extended circumstellar nebulae (LBVN) around several LBV. The geometry of these nebulae is sometimes symmetric, other times show bipolar or asymmetrical morphology. LBV winds/outbursts are among the major contributors of processed material (gas and dust) and kinetic energy to the ISM. Moreover, as LBVs are SN progenitors, the structure of their ejecta may also influence the geometry of SN remnants. An overview of the LBVN characteristics, in particular as revealed by radio and IR observations, will be given, together with the possibility to derive the circumstellar environment at the moment of the SN explosion.