

# Alternative methods of producing photoionised plasmas in the laboratory

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## **Abstract**

In this talk I will discuss new methods for overcoming the high densities and low radiation temperatures obtained in the laboratory relative to astrophysical photoionised systems[1].

The kinetics of the Helium-like ions in astrophysical and laboratory plasmas will be discussed and parametrized, and a method of producing radiation fields which cause atomic kinetics characteristic of a high colour temperature radiation field will be presented, accompanied by simulations both of experiments based on these ideas and of previously performed photoionised plasma experiments.

[1] Hill E.G. and Rose S.J. HEDP 7 (2011)