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Charge state distribution studies of metallic Electron Cyclotron Resonance (ECR) plasma PRAVIN KUMAR, DENAKER KANJILAL, Inter University Accelerator Centre (IUAC), GILLES CARTRY, Univ. Provence - CNRS — 10 GHz all-permanent magnet ECR ion source placed on 200 kV high voltage platform is operation since 2000 at Inter University Accelerator Centre (IUAC), New Delhi India. The source is being used regularly for extracting various gaseous and metallic ion beams for research experiments mainly related to materials science. The source performance has been very good for delivering gaseous beams. However, metallic ion beams suffer from fluctuations and instabilities in the current measured at Faraday cup. Some methods of metallic ECR plasma generation and charge state distribution studies of plasma will be presented.

> Gilles Cartry Univ. Provence - CNRS

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