A progress report on the LXCat project[1] SERGEY PANCHESHNYI,
ABB Corporate Research, LEANNE PITCHFORD, LAPLACE, CNRS and University of Toulouse — LXCat is an open-access, web-based platform (www.lxcat.net) for storing, exchanging and manipulating data for modeling the electron and ion components of low-temperature, non-equilibrium plasmas. The data types supported by LXCat are electron and ion scattering cross sections and rate coefficients, electron and ion swarm/transport parameters, ion-neutral interaction potentials, and optical oscillator strengths. On-line tools allow for searching, graphical display, and downloading of data, and an on-line Boltzmann solver allows users to calculate electron transport and rate coefficients in arbitrary gas mixtures if "complete" sets of cross sections for the individual components are available in the databases. At present, 24 public databases contributed by different groups around the world can be accessed on LXCat. The database contributors retain ownership and are responsible for the contents and maintenance of the individual databases. New contributors are welcome and can request an account and receive instructions for setting up a password-protected database on LXCat. This presentation will summarize the LXCat project objectives, its structure, the available databases, and the current status of the project.

[1]Presented on behalf of the LXCat Team

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