

Dielectronic and trielectronic recombination in sulfur ions

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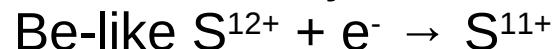
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With use of collisional spectroscopy at the electron cooler and with a ions from **local ion source** we would like to investigate DR and intrashell TR processes.

Mainly:



Here, resonances:

DR $2s^2 \rightarrow 2s^1 2p^2$ and TR $2s^2 \rightarrow 2p^3$ ($\Delta n=0$, collisional energy $< 1.2\text{eV}$)

DR $1s^2 2s^2 \rightarrow 1s^1 2p^2$ and TR $1s^2 2s^2 \rightarrow 1s^1 2p^3$ ($\Delta n=1$, collisional energy $\sim 2000\text{eV}$)

**Beam energy $\sim 14\text{ MeV/u}$, intensity: $\sim 10^7$ ions, count rate $\sim 0.7\text{kHz}$,
Number of shits ~ 25**