Measurement of Electron Cyclotron Resonance Ion Source Bremsstrahlung and Ion Production Time Evolution

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2. Data acquisition
3. The effect of collimation

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1. Distance between ECRIS chamber and Ge detector about 1 m
2. The effect of opening and shielding around the collimator was studied
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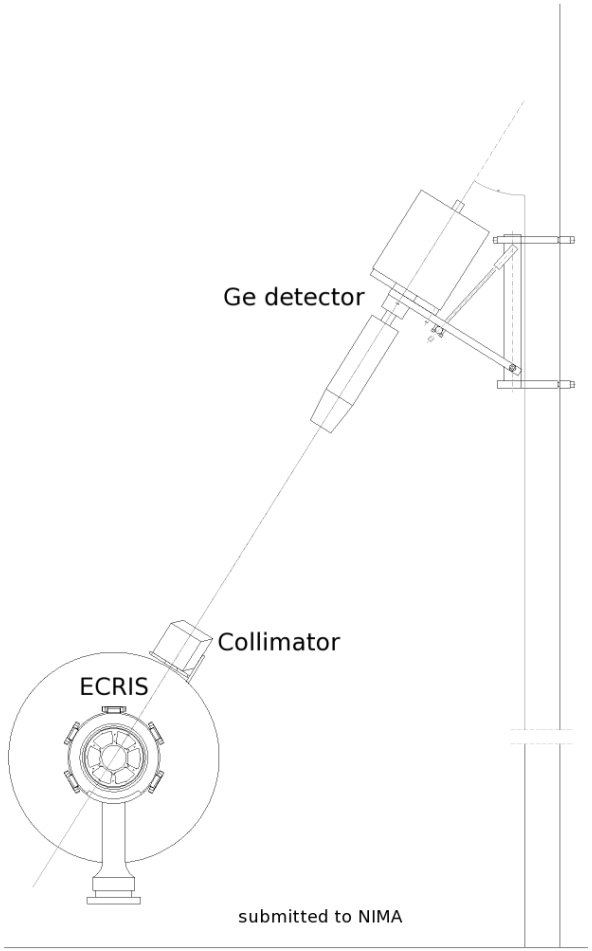
   - Hole did not change the count rate or the shape of the spectra
   - Shielding changed the count rate and the shape of the spectra



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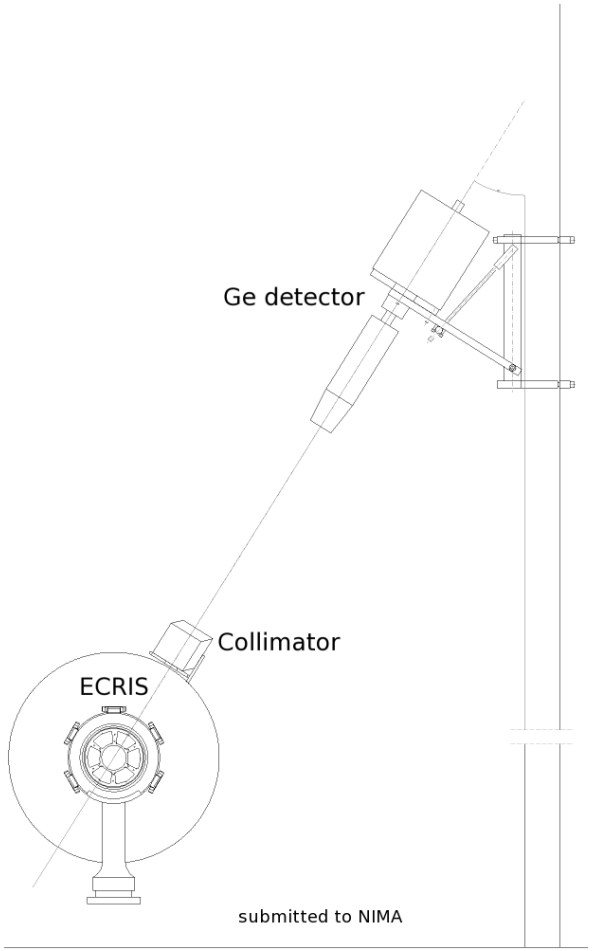

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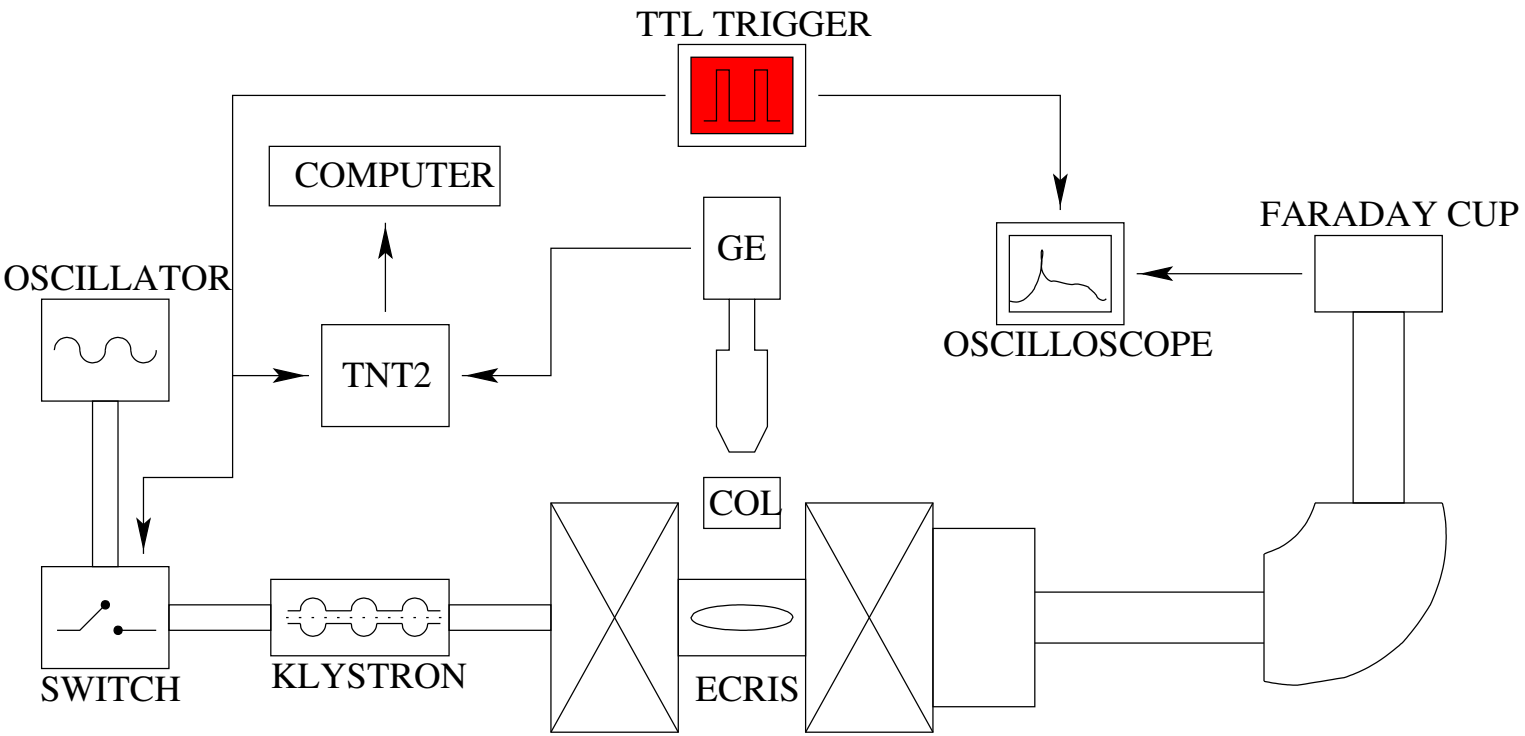

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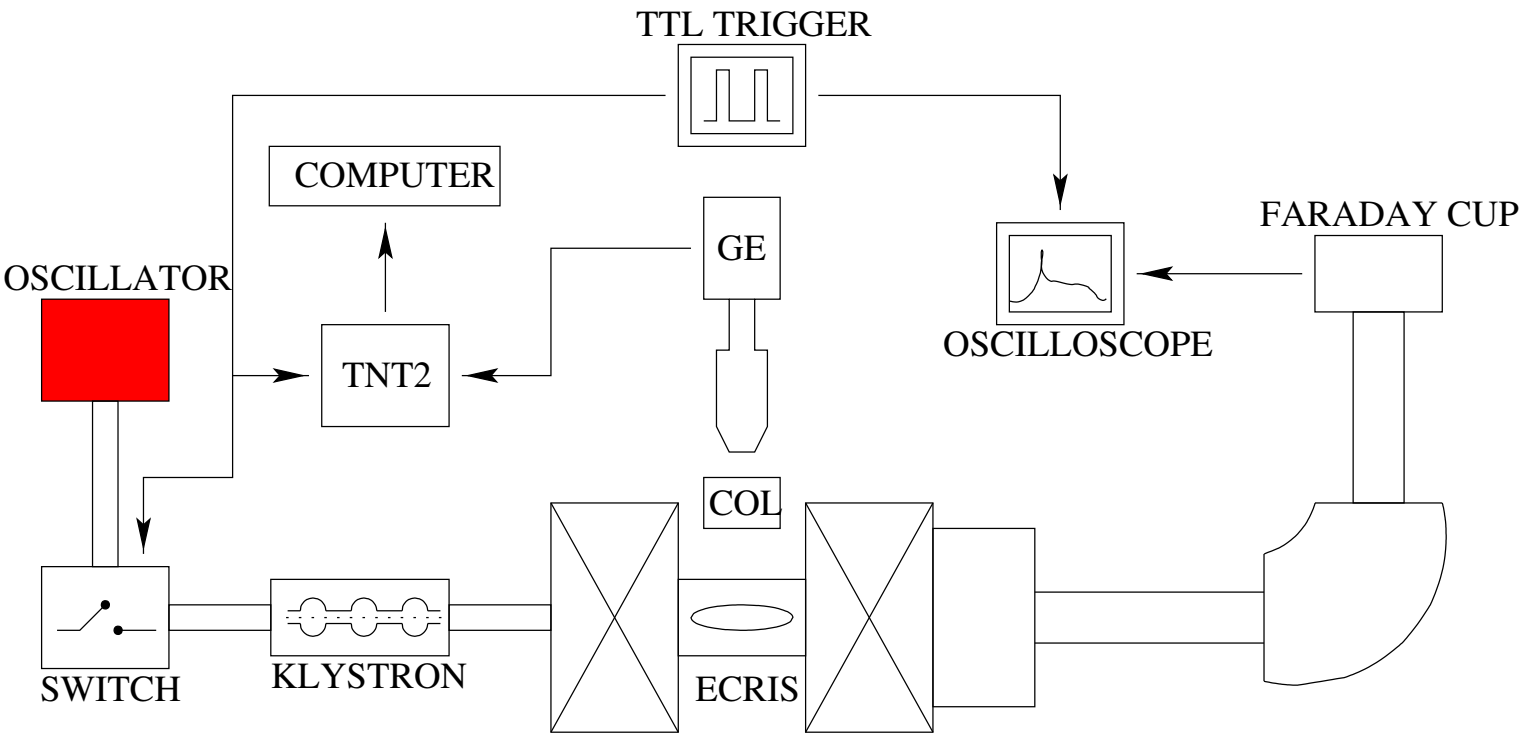

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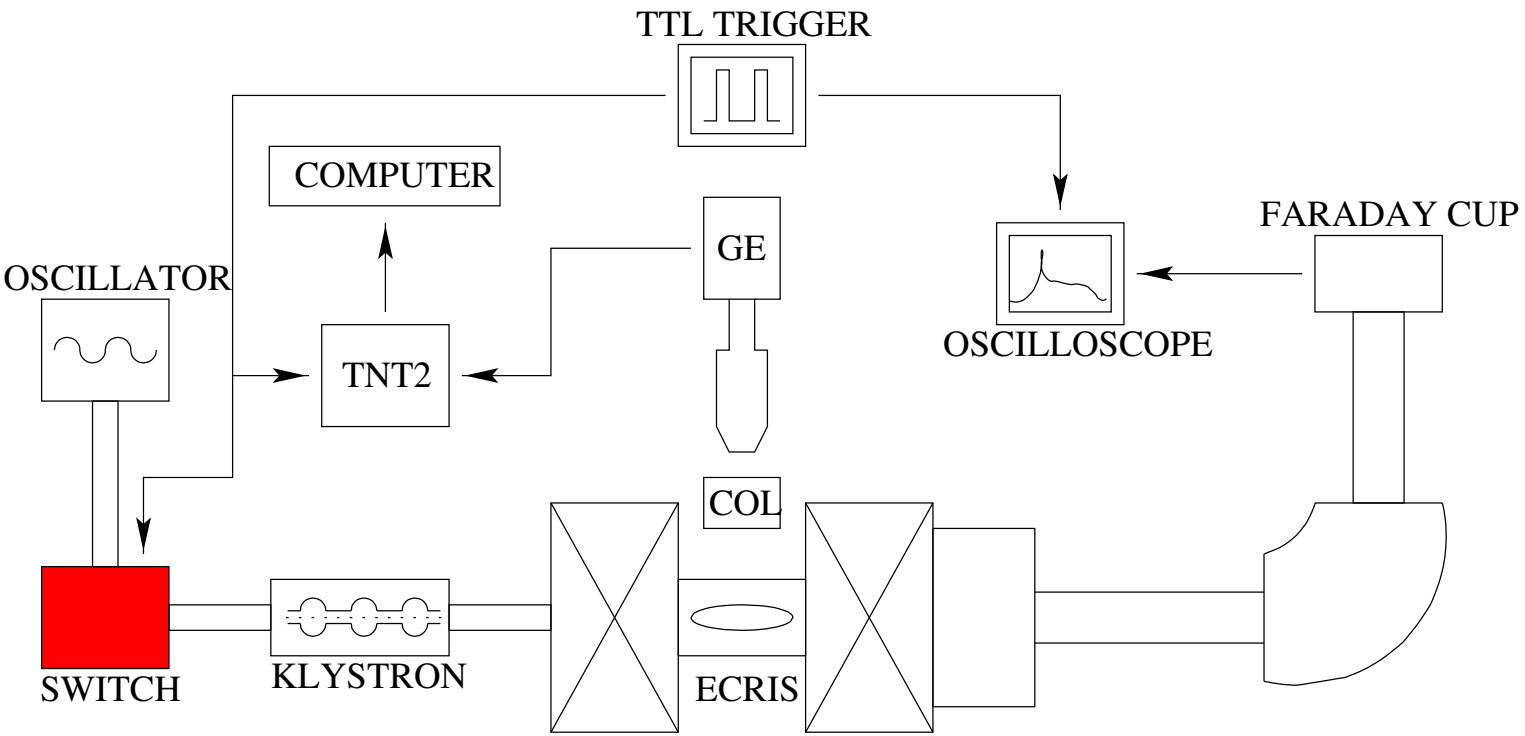

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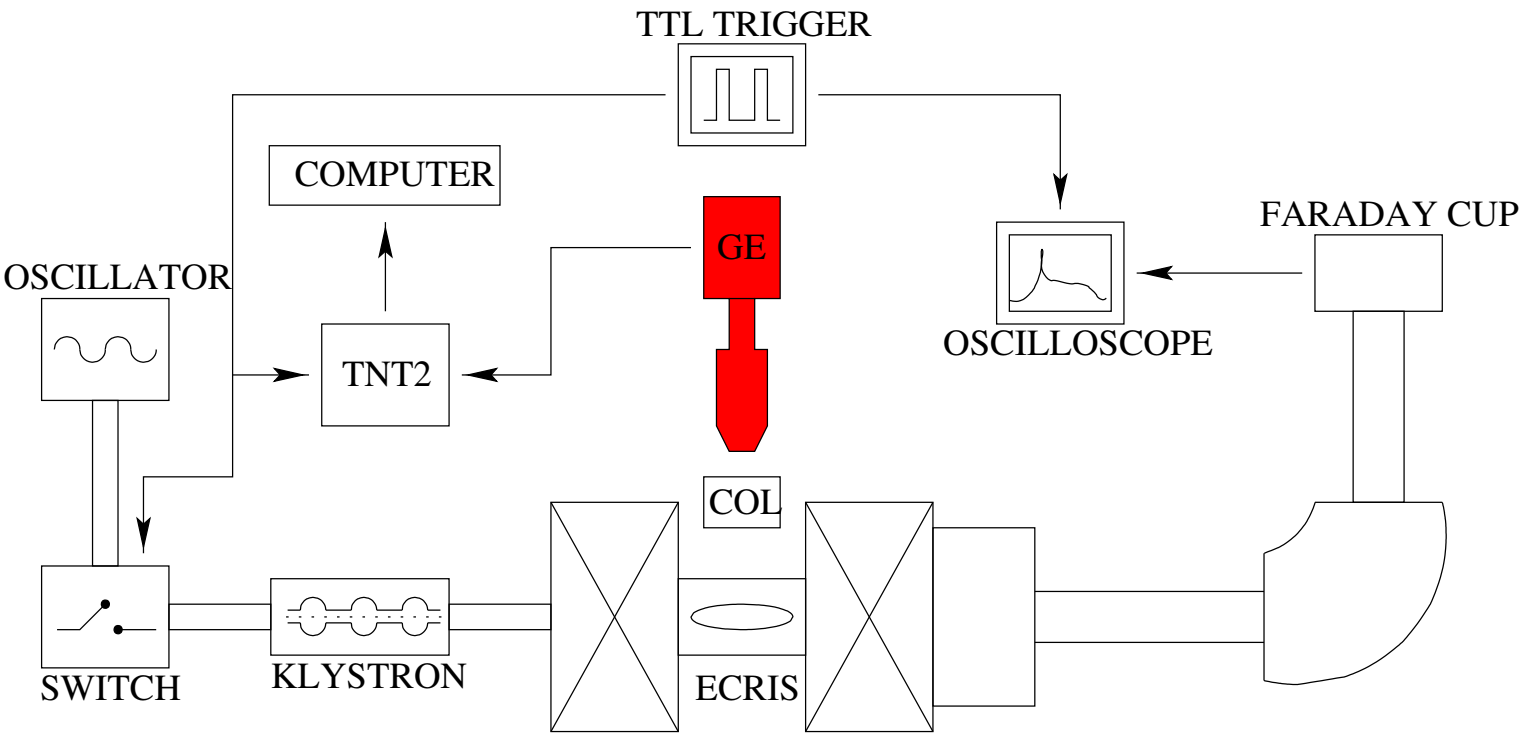

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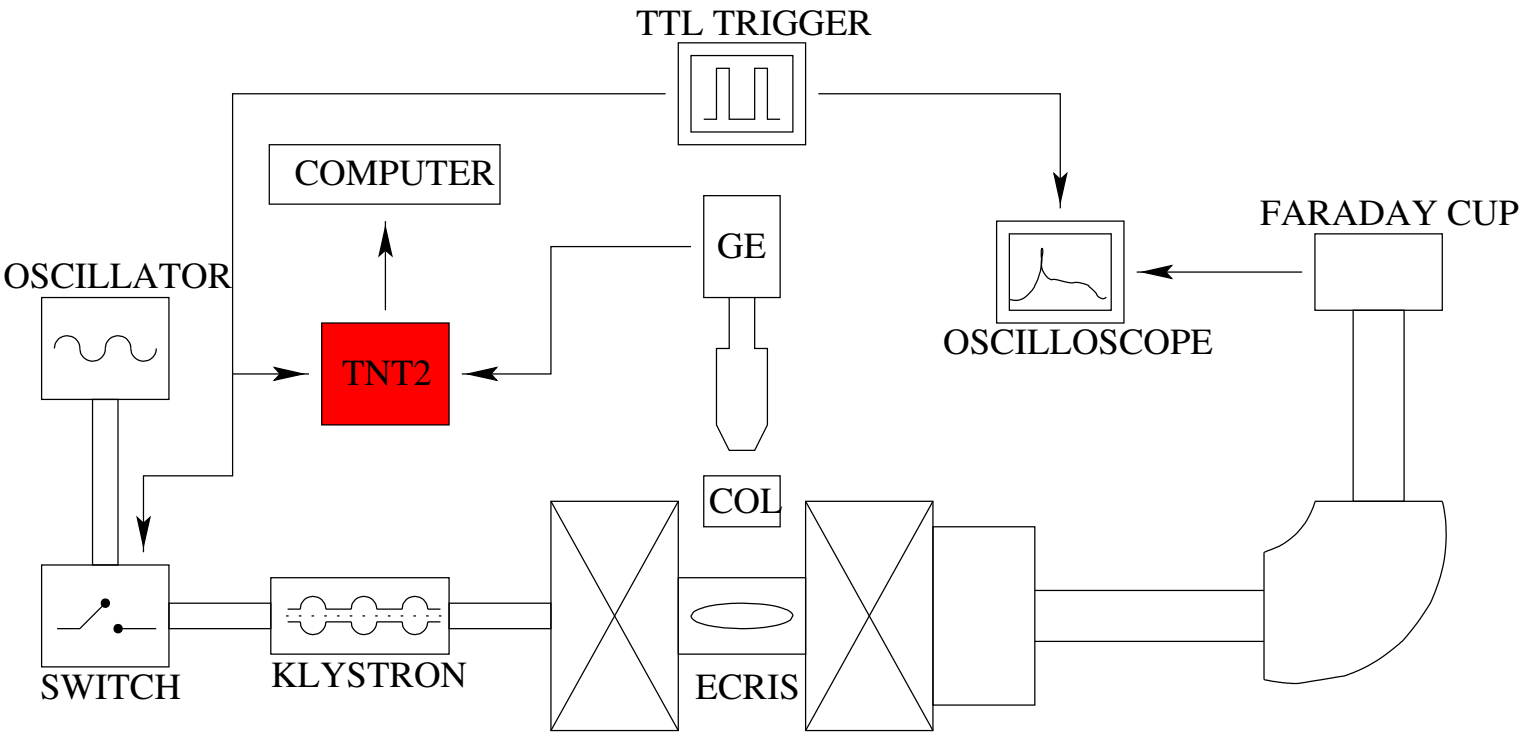

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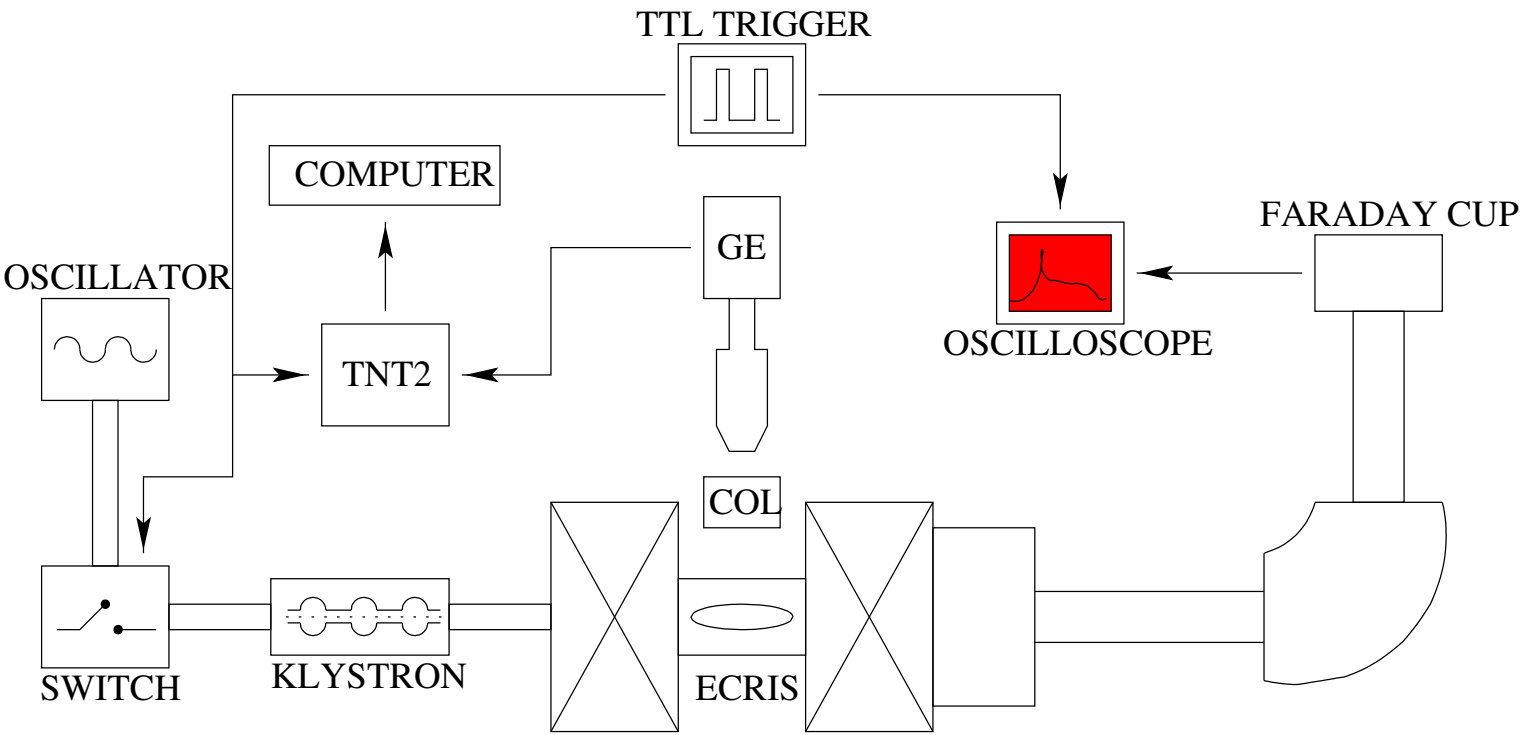

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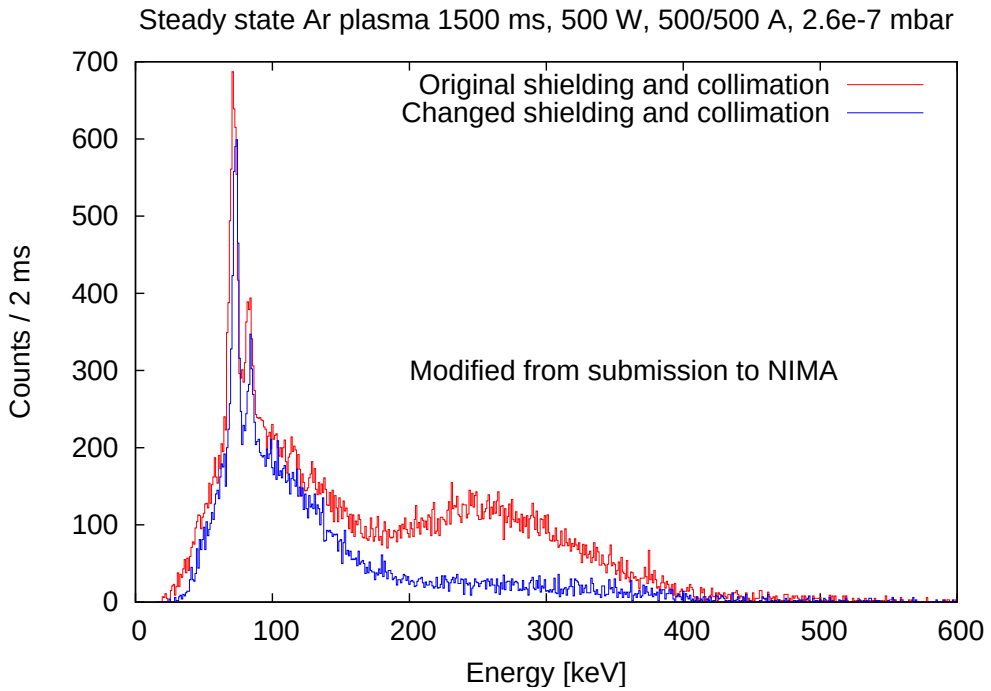
2. Original shielding (Pb plates) around the collimator: "hump"



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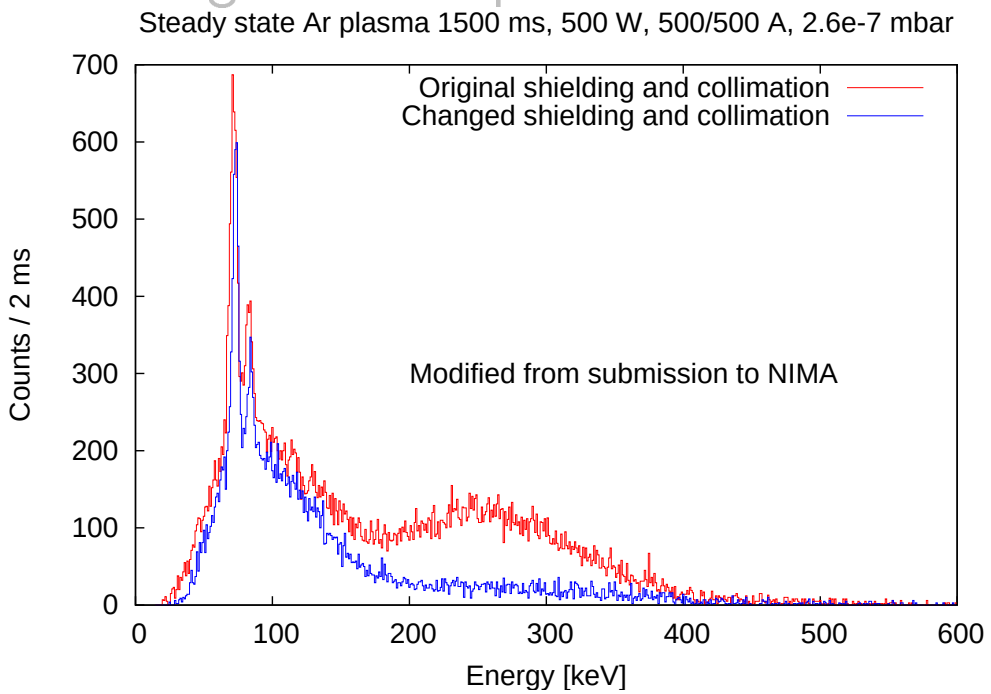

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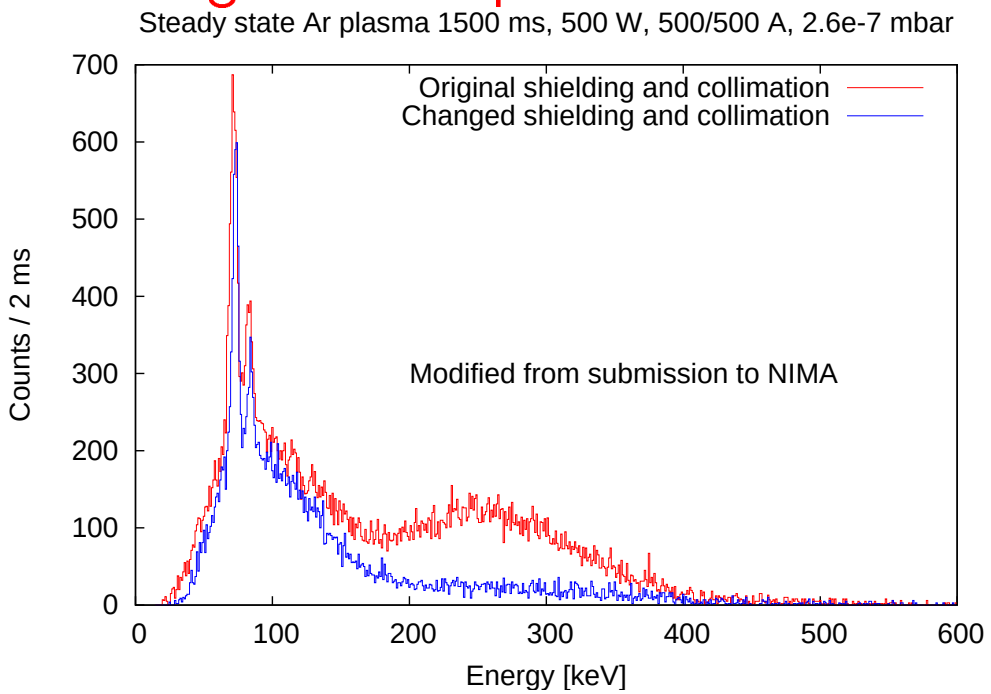

Time scale comparison with different shielding

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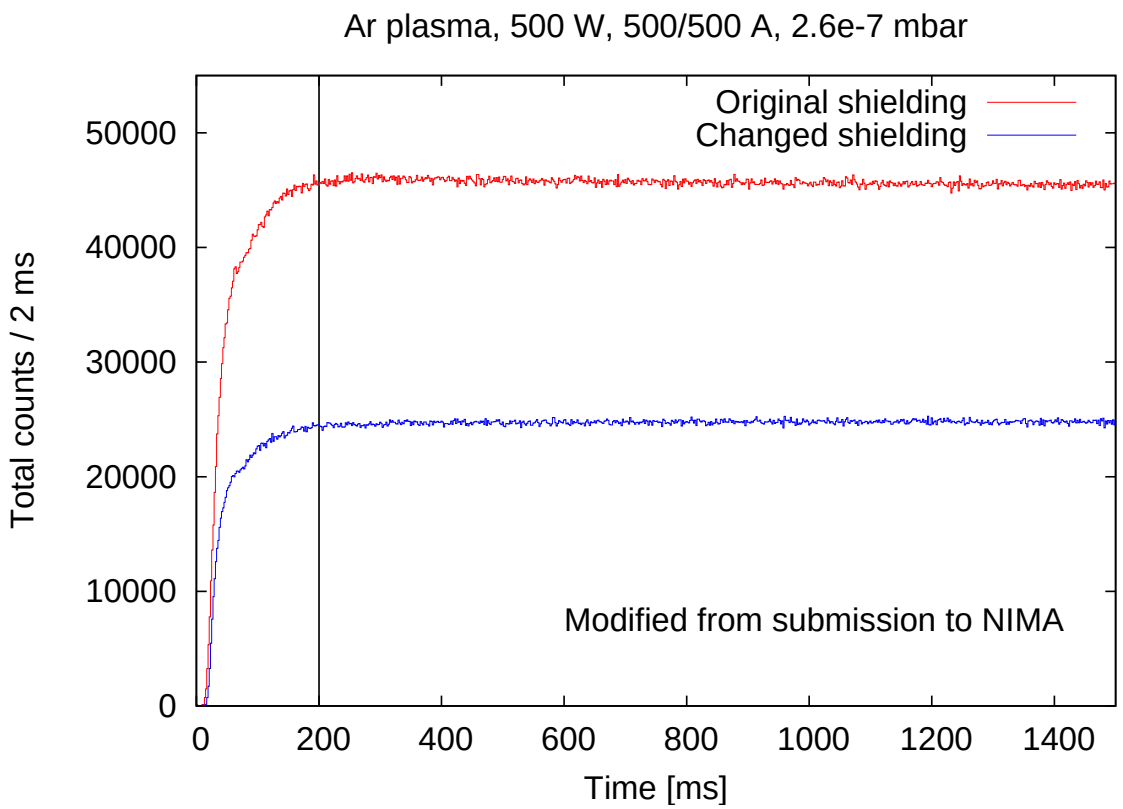

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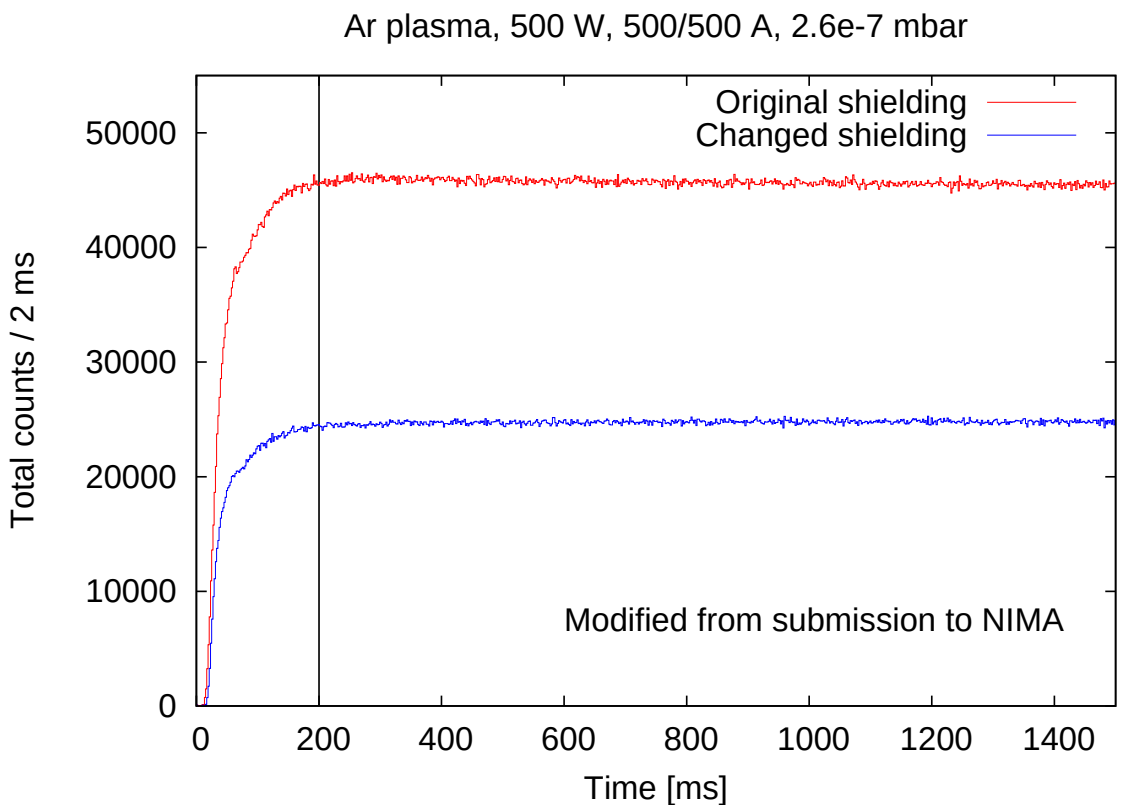

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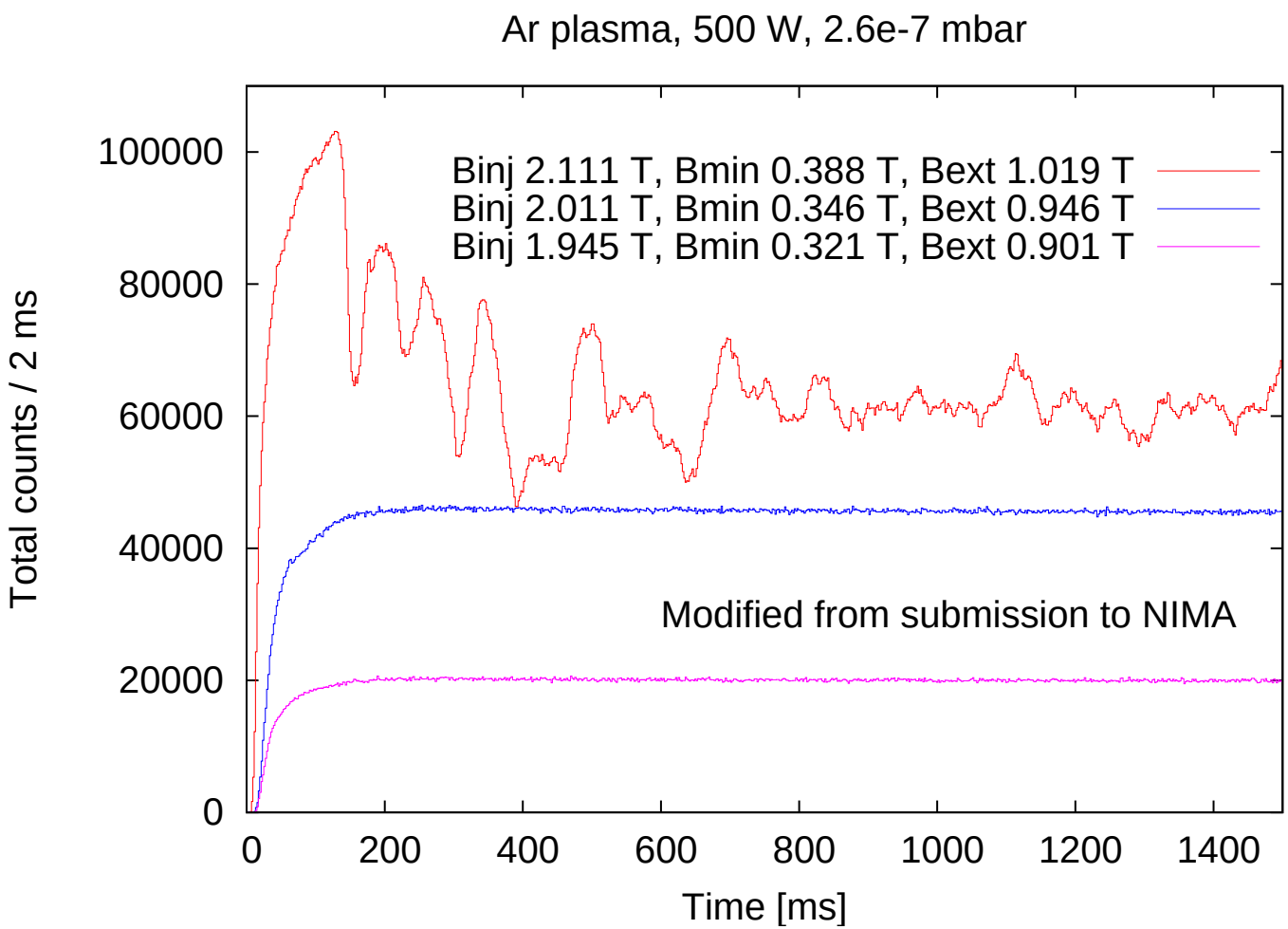

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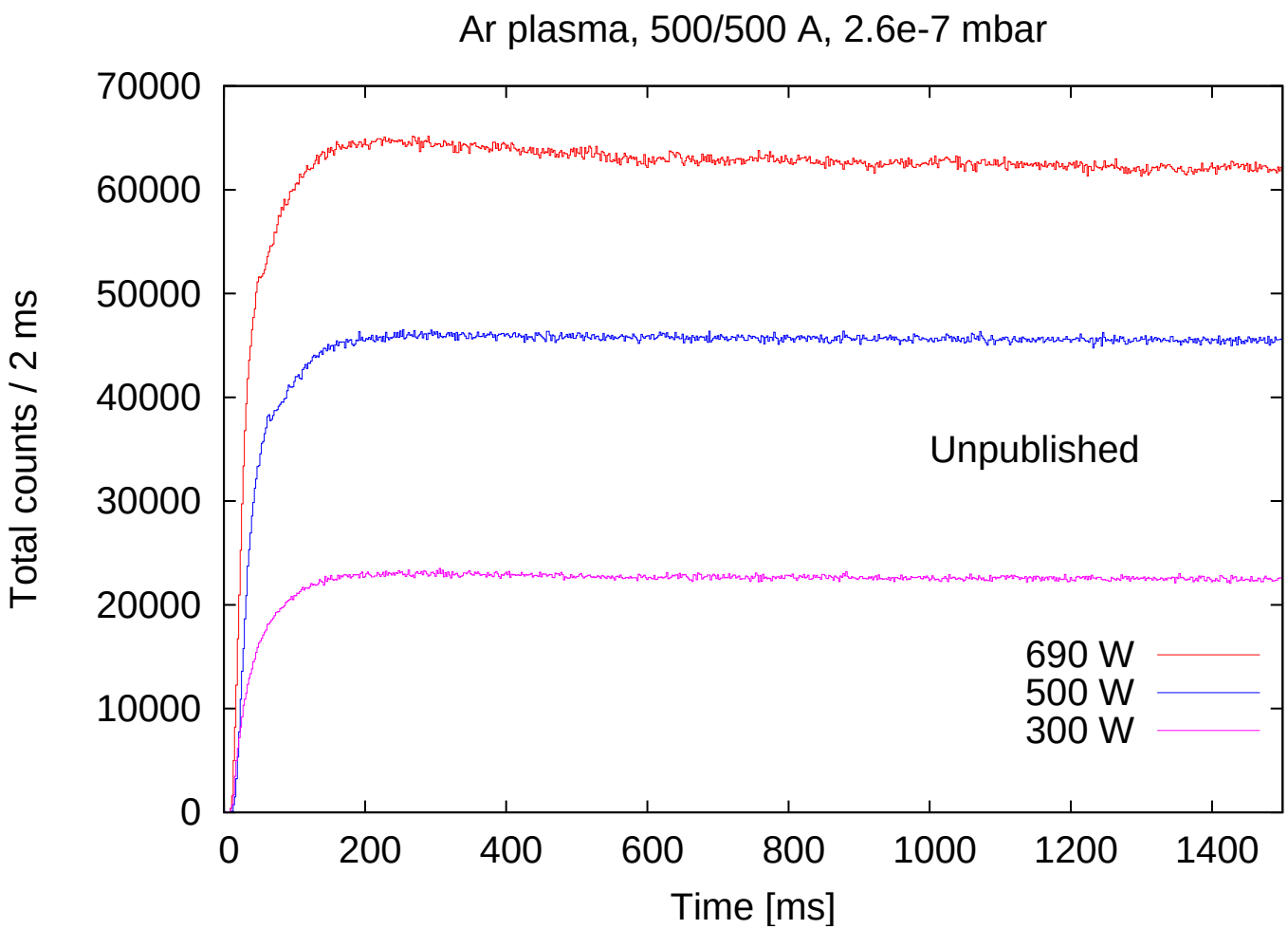

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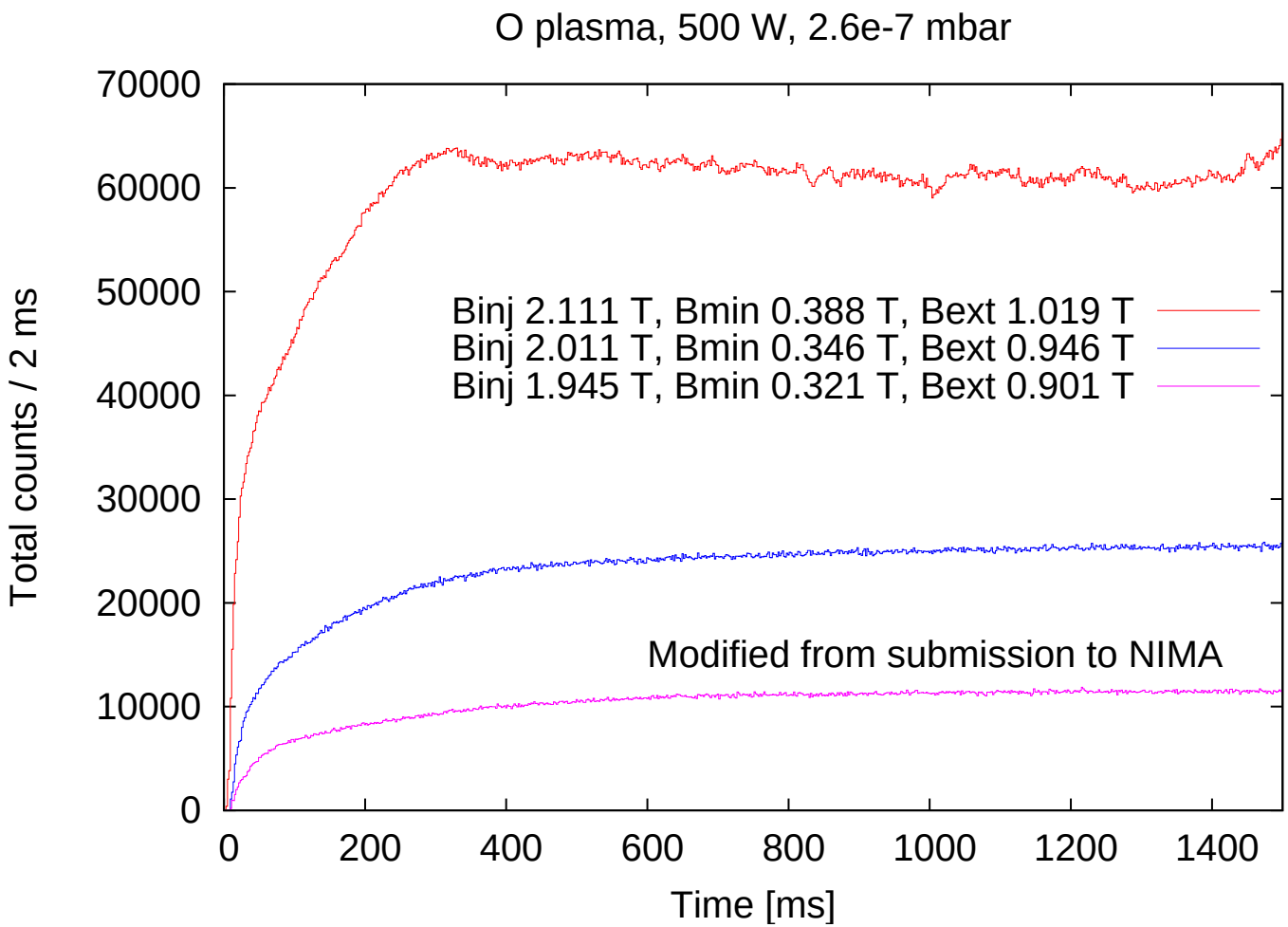

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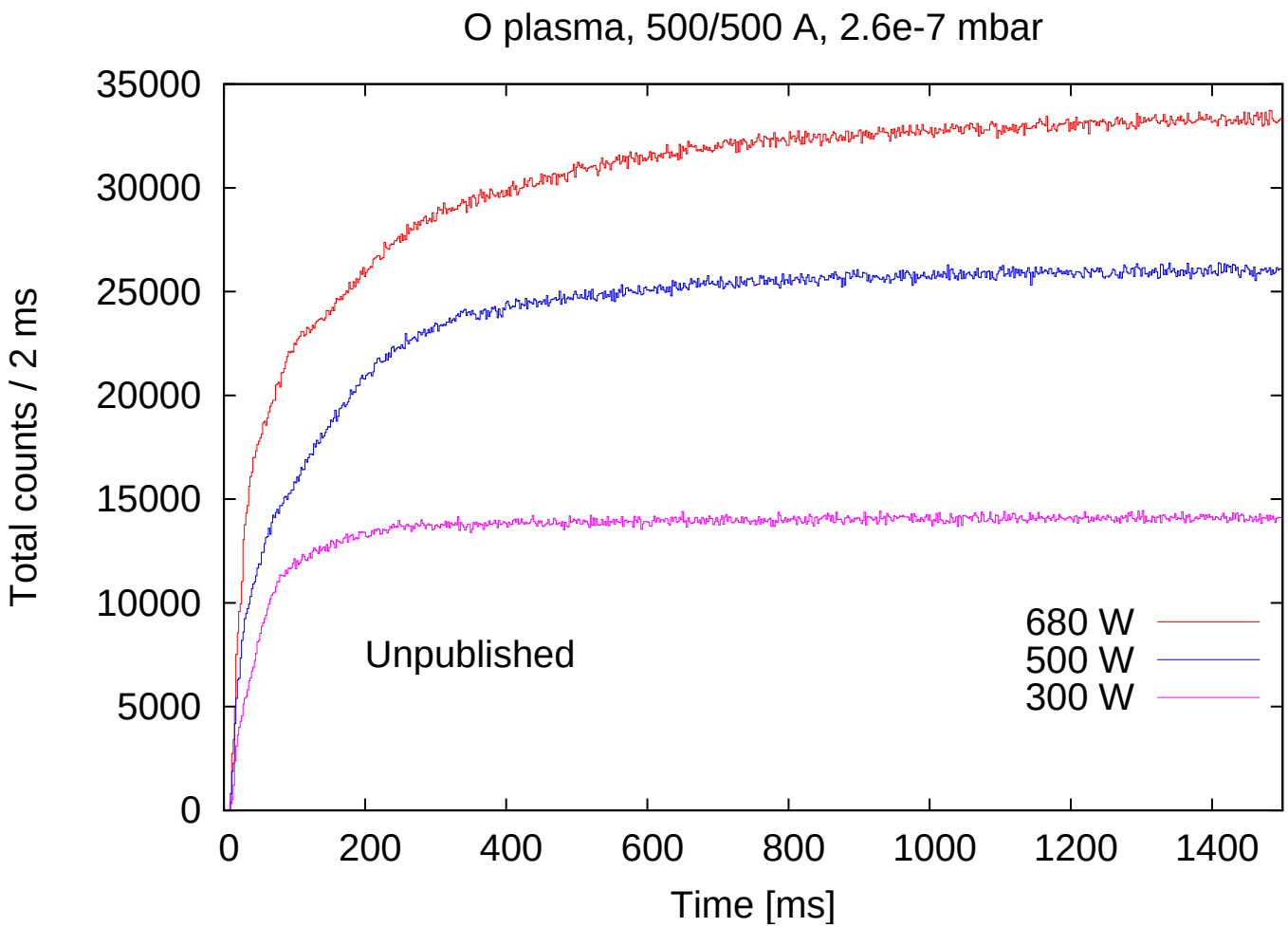

"RF on" phase animation

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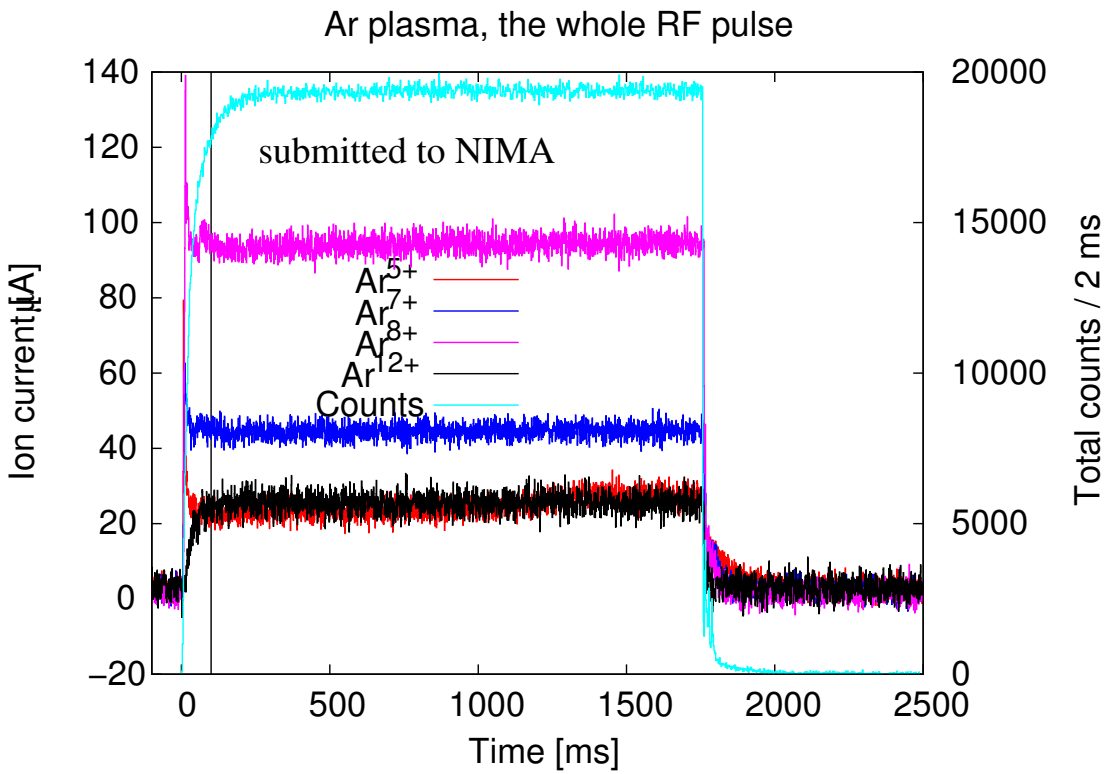

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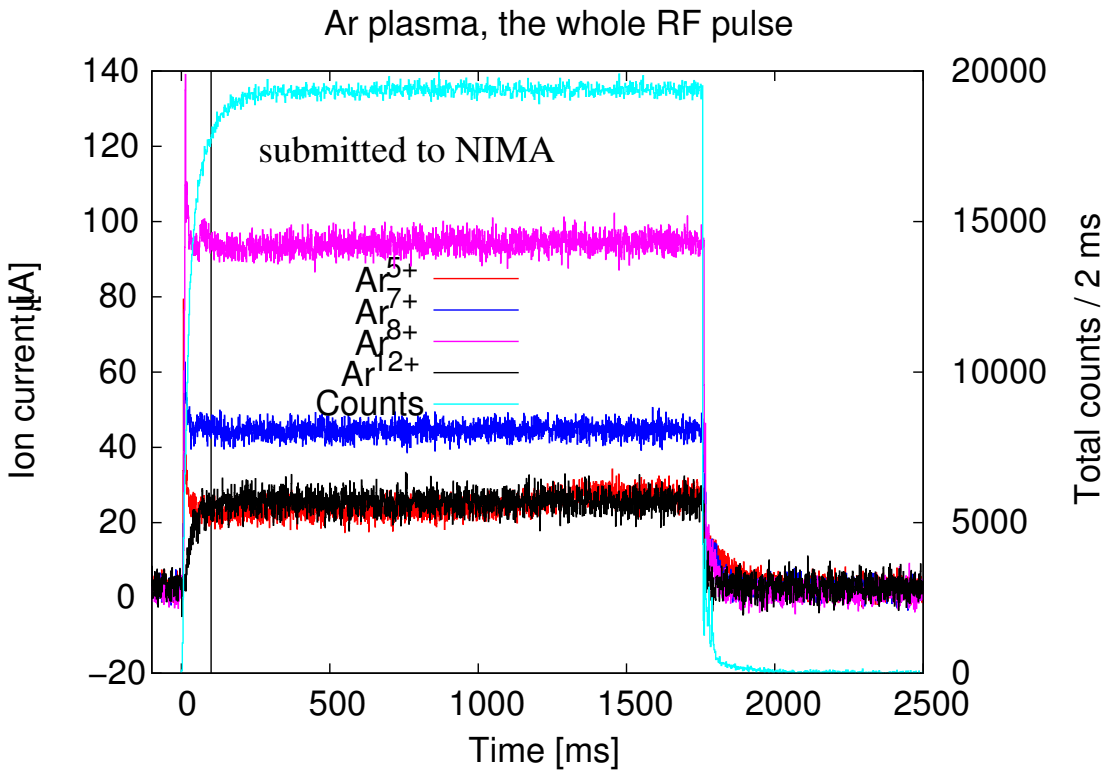

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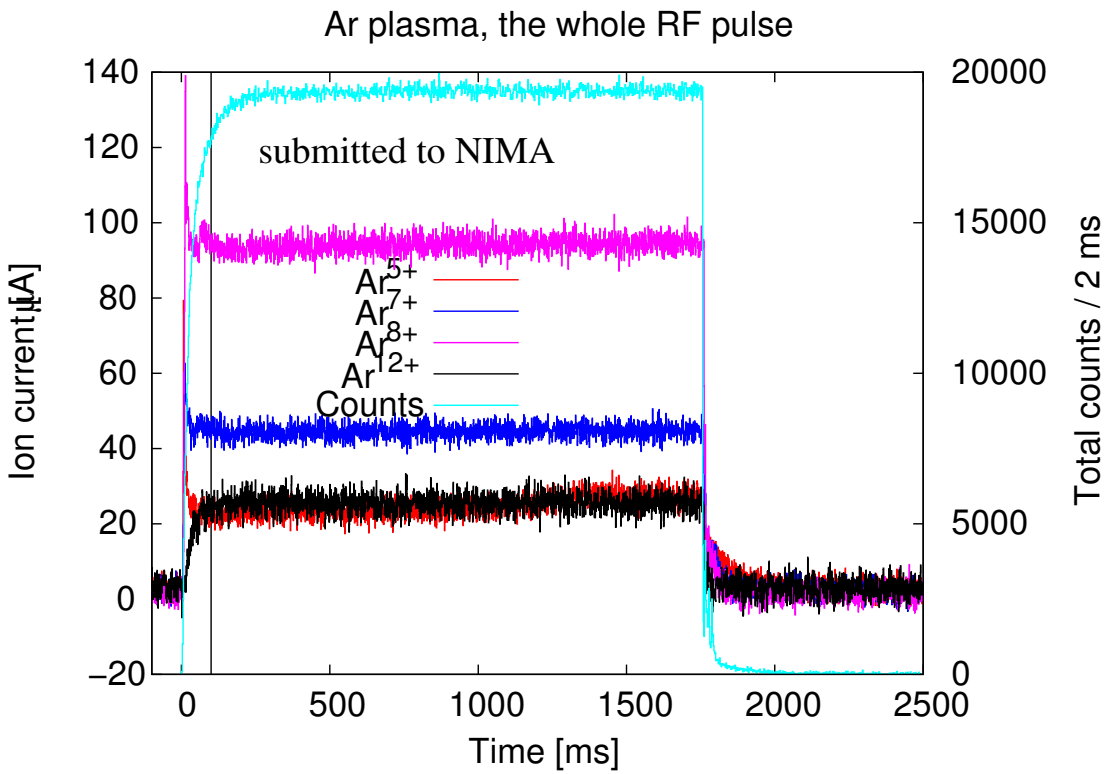

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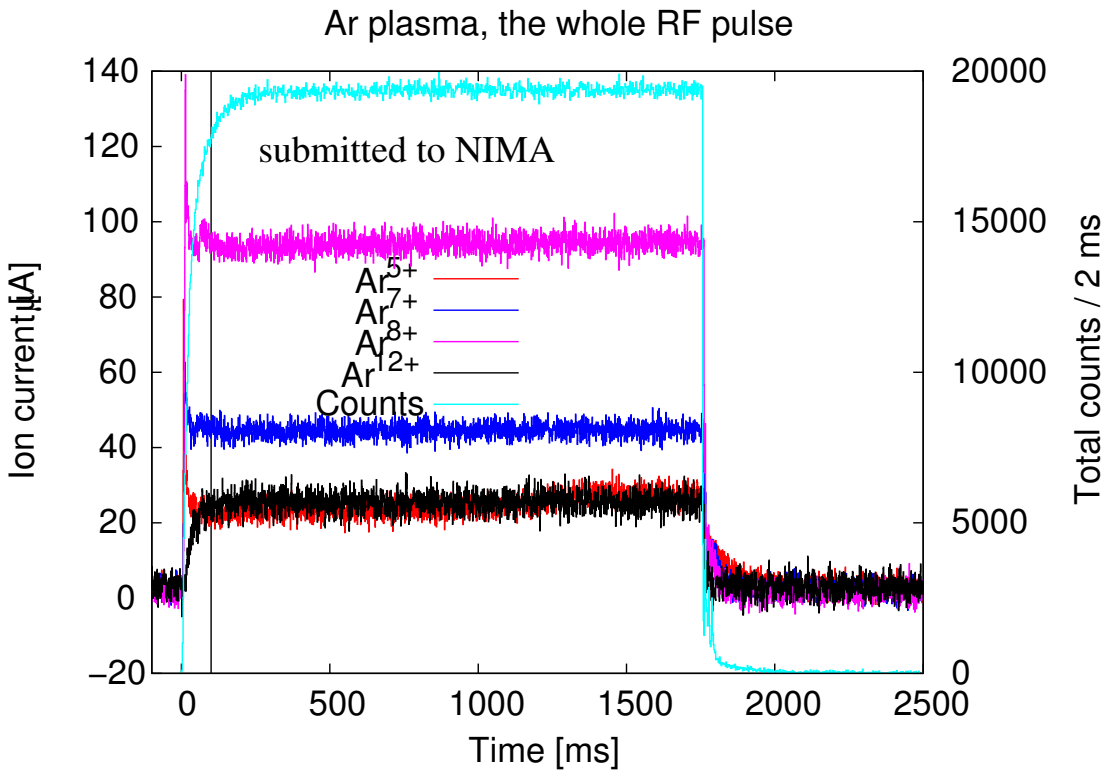

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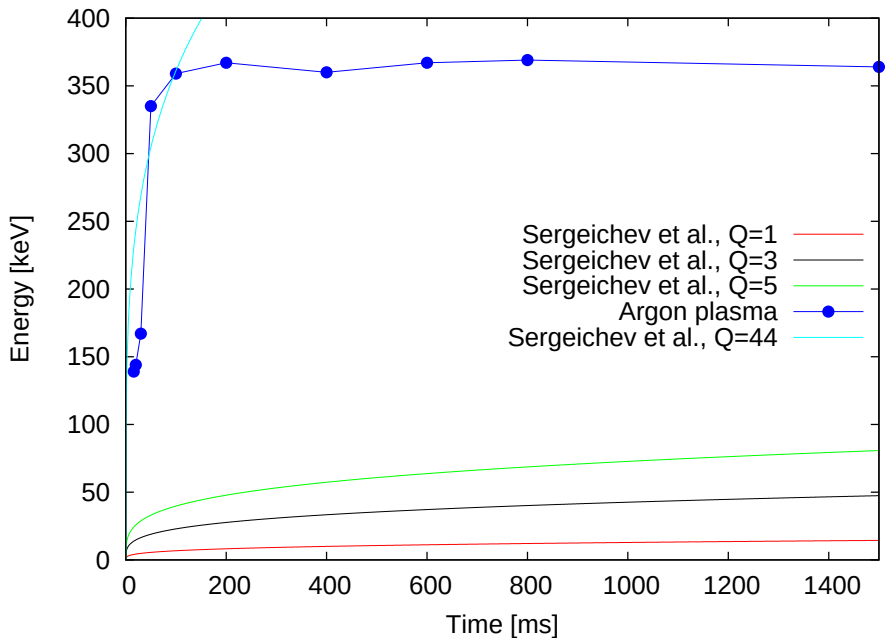

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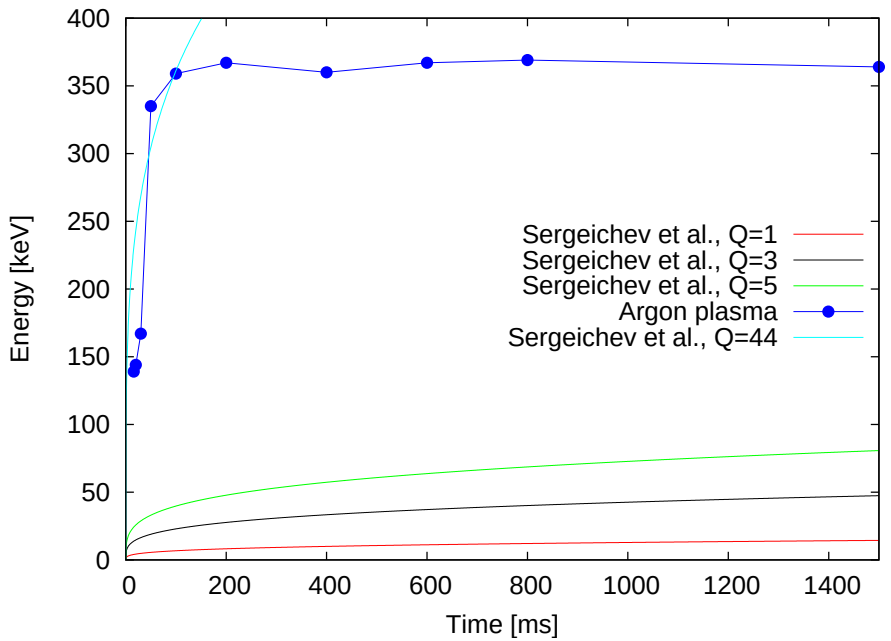

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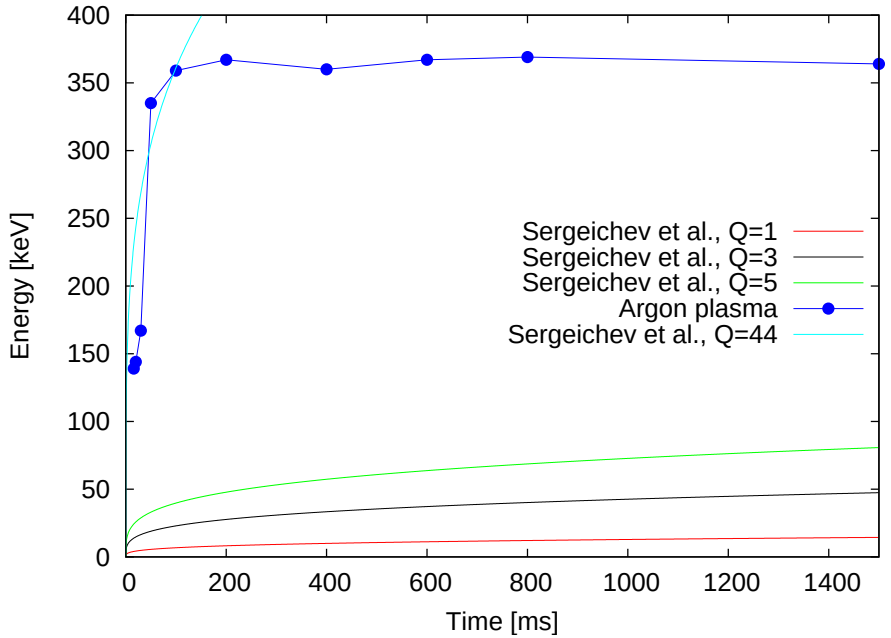

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Thanks to

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- Dr. Olli Tarvainen (LANL)
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- Pauli Peura (JYFL, nuclear spectroscopy)
- Prof. Rauno Julin (JYFL, nuclear spectroscopy)
- Taneli Kalvas (JYFL, RADEF)