

Towards single sodium atom in ODT

Yichao Yu

Ni Group/Harvard

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- 1 Sodium ODT beam path
- 2 Further characterization of the cesium trap
- 3 Sodium MOT

Sodium ODT beam path

- It works.

AOBD for Na ODT

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AOBD for Na ODT

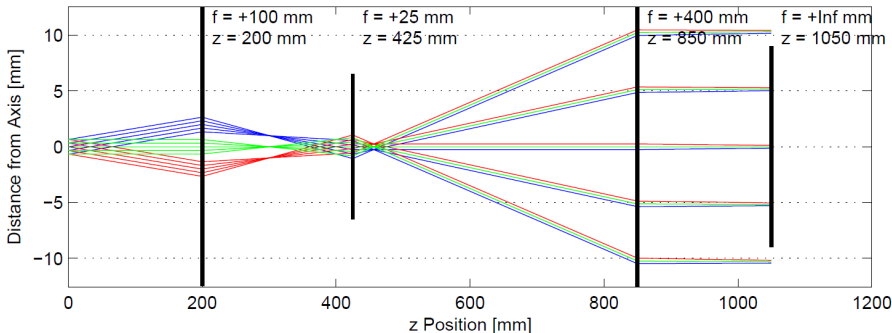
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AOBD for Na ODT

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- But it doesn't integrate into the current beam path very well.

AOBD for Na ODT

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- But it doesn't integrate into the current beam path very well.
- Solution.



Further characterization of the Cs trap

- ODT with non-magic wavelength.
- Lifetime.
- Temperature. Measured with release and recapture.

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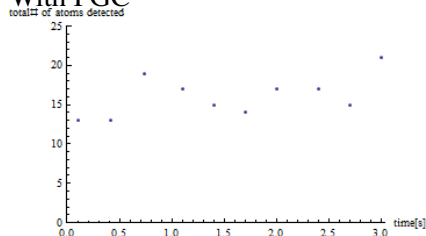
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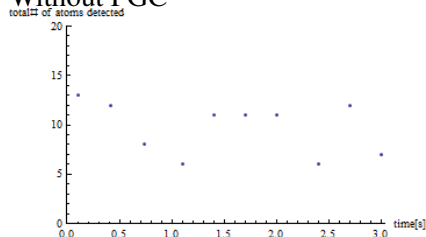
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With PGC

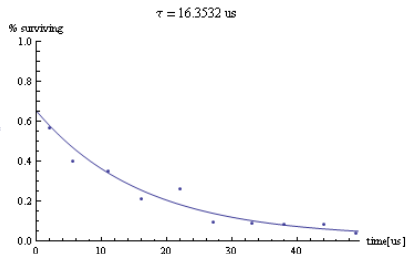


Without PGC

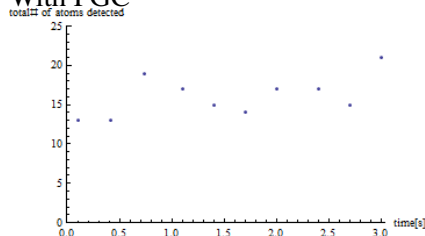


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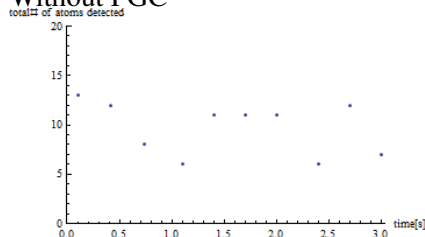
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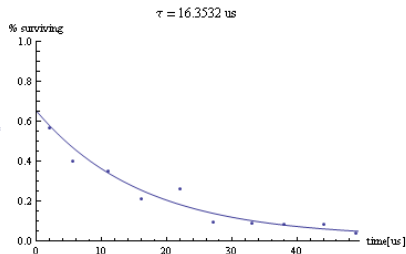


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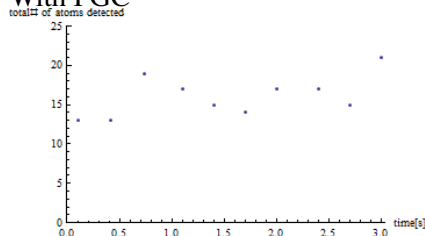


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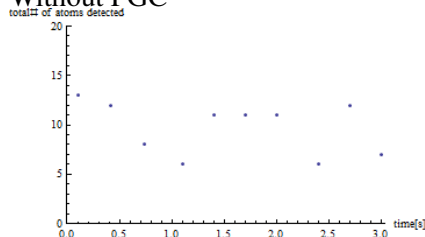
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Preliminary result: $25\mu K$
Agrees with the measurement in free space: $5 - 40\mu K$



With PGC



Without PGC



Na MOT

- No sodium MOT.
- Laser noise.

Na MOT

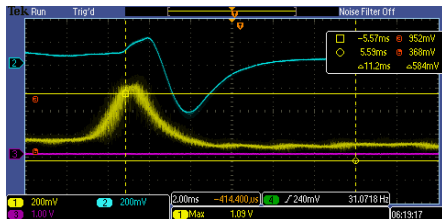
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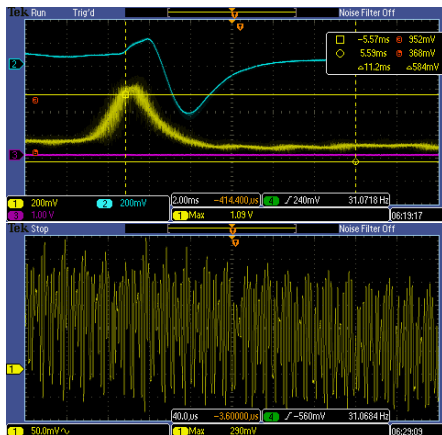
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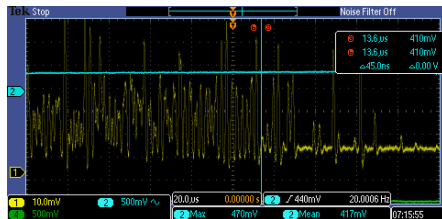
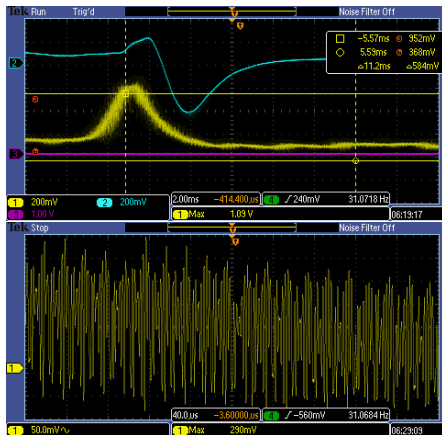
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