

## Revisiting collimators:

- PRL Suppl Mat  $\Rightarrow$  we can cut backscatter by 2-3. Cu coils unchanged.
- CeSiC makes more forward scattering than SS.

Smaller backscatter, so I thought CeSiC best anyway.

Then Alexandre improved the design, adding:

- cleanup thin W for forward scattering, and
- glassy carbon in front. Minimizes backscatter with or without CeSiC

The W limits forward scattering well (even with finite trap cloud in G4).

We would add a thin SS double-sided CF to place each mirror

So I propose:

- stay with SS and live with that amount of forward scattering (the PRL Suppl Mat suggests it's a tiny effect),
- add the glassy C to cut the backscatter. Less invasive of the setup, and **preserves alignment**. Vertical alignment really is **critical** for either RAC or AC MOT.

Alternatively, we could do nothing inside. We have so many external things to fix that we are in some trouble now.