SoLID

Radiation On the Calorimeter preliminary study

Outline

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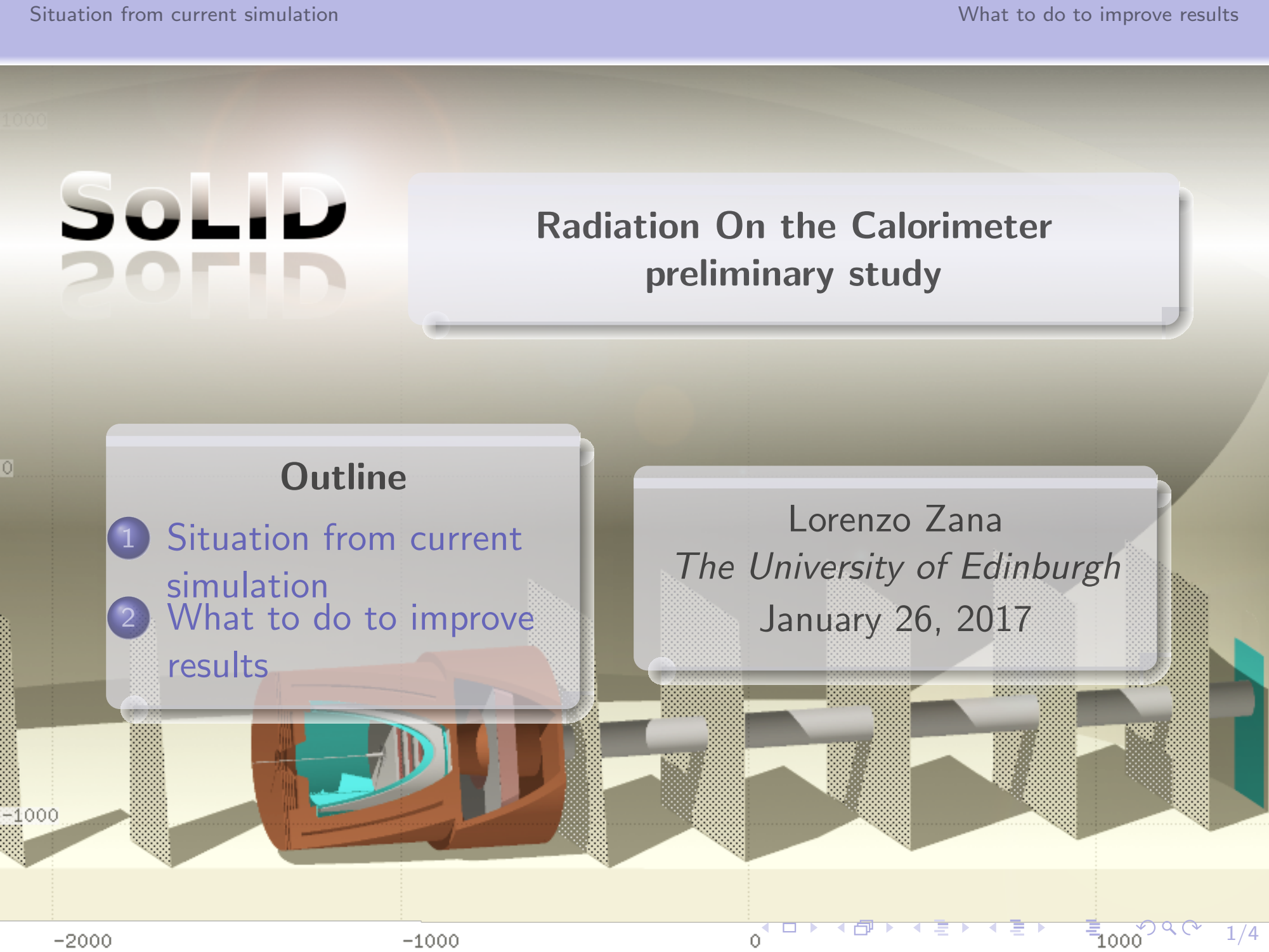
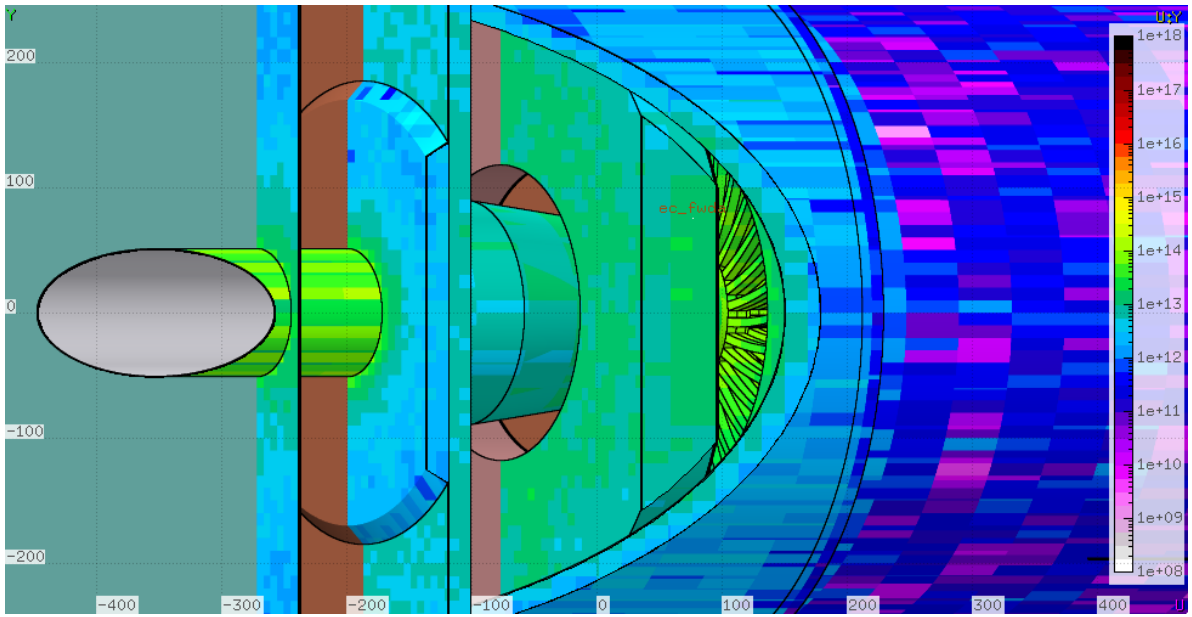


Situation from current simulation

$\left(\frac{1 MeV_{eq} Neutron}{cm^2}\right)$

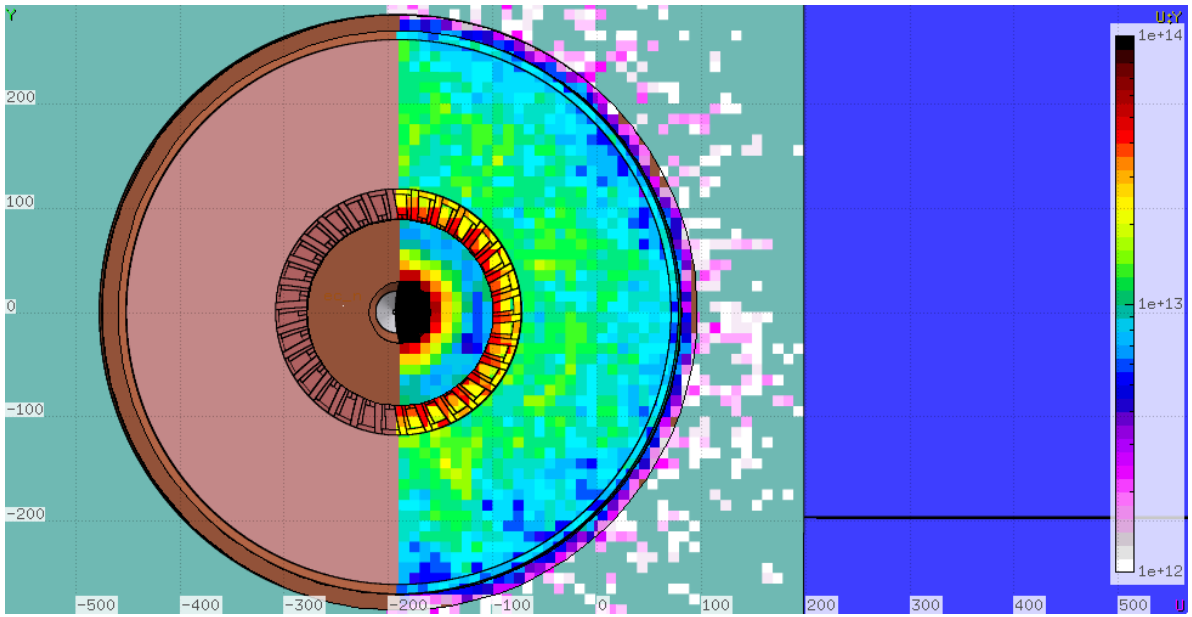
PVDIS configuarion with Deuterium: Dose for 2000h at $100\mu A$



Situation from current simulation

$\left(\frac{1MeV_{eq}Neutron}{cm^2}\right)$ Particular on flux on calorimeter

PVDIS configuarion with Deuterium: Dose for 2000h at $100\mu A$



What to do to improve results

This simulation was done to map the radiation inside the Hall

- Binning was too big (fluxes are averaged inside the bin)
- No phi simmetry (will speed up the result)
- I did not care about the structure of the calorimeter, because I needed just to have the right amount on material in place.
- All this one could improve with a dedicated simulation for this area of the EC