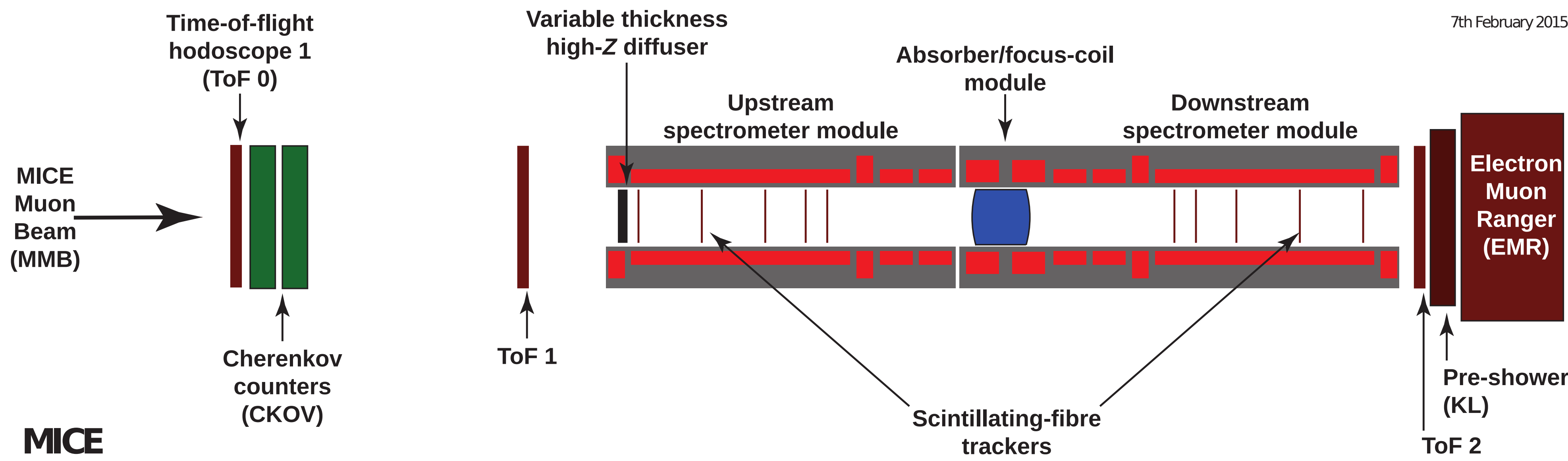


Hybrid Methods for Simulation of Muon Ionization Cooling Channels

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MUON IONIZATION COOLING EXPERIMENT (MICE) LAYOUT



ABSORBERS

Talk about progress on absorbers, add pictures that illustrate agreement with other simulations (G4beamline, ICOOL), with data (MuS-cat) - all the usual stuff. This could possibly span more than one column if need be.

MAGNETIC COILS

Talk about your recent tests with magnetic coils, show those figures with grids of particles, showing agreement when there only magnetic coils in the simulations.

CURRENT CHALLENGES

Start by showing the layout of one of the cooling cells we are considering beyond MICE: with tilted coils and RF cavities clearly marked.

The main challenge is once all of the individual elements were implemented and/or validated separately, we need to combine them into a single lattice and see how well they play together, and that work is currently underway.

The other rather non-trivial thing to do in COSY is to implement tilted coils that are required in some configurations (see figure above).

CONCLUSIONS

Summary...

REFERENCES

References...