



## AWAKE RUN 2 Diagnostics



- ◇ p<sup>+</sup>: standard beam line diagnostics
- ◇ p<sup>+</sup> SSM: OTR and streak camera, needed on every event!
- ◇ Wakefields (plasma): Schlieren, interferometry, photon acceleration, ???
- ◇ e<sup>-</sup>: standard beam line diagnostics, screen-based?

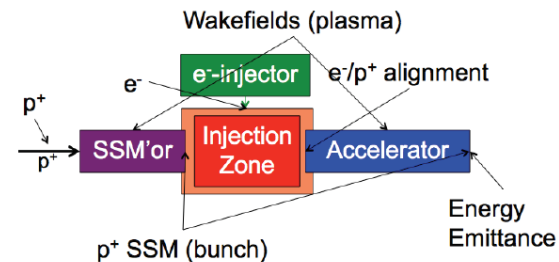
◇ e<sup>-</sup>/p<sup>+</sup> alignment: OTRs, screens, ???

◇ Timing

- ◇ Timing e<sup>-</sup>/p<sup>+</sup>: online EOS (p<sup>+</sup> halo?)
- ◇ Timing e<sup>-</sup>/wakefields?

◇ Energy: spectrometer

◇ Emittance: single shot ( $\beta$ -tron, optical pepper pot, ???), separate e<sup>-</sup>/p<sup>+</sup>



- ◇ Laser-ionized, rubidium plasma imposes strong constraints (200°C, chemically reactive, metal deposition?, etc.)
- ◇ p<sup>+</sup> bunch at (1/20)Hz at best ...

