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## Optimized setup for a laser-induced Plasma Photocathode

*Tuesday, 8 November 2022 17:00 (2h 30m)*

We present different possible ionization volumes/shapes inside a Plasma Wakefield to realize the Trojan Horse Injection method. Our all-optical setup uses tailoring of the laser near field to produce an adjusted laser focus profile and therefore an optimized ionization volume and state. Different initial beam profiles show different behaviors in our simulations hence we showcase various potential witness bunches.

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