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## **[921] Cell poration of fixed and live cells by phase shaped femtosecond pulses**

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In femtosecond optical transfection and nanosurgery, cell survival critically depends on phototoxicity. We demonstrated on fixed cells that the use of femtosecond third order phase pulses (Airy pulses) could modulate the photon-interaction in cells leading to a better membrane poration efficiency energy per pulse than bandwidth limited femtosecond pulses.

We also discuss results from a live cell experiment. We set up a protocol where we investigate cell viability as a function of pulse spectral phase. Hence, we present an ad hoc protocol based on the use of three fluorophores to assess cells viability at different time points after poration.

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