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## **Fusion Ignition Driven by Pulse Power**

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A low-current-fusion (LCF) ignition path below 6 MA is hinted by high-gain high-field (HGHF) plasma within tokamak vacuum vessel due to recent successful experiments of magneto-inertial fusion (MIF) [M. R. Gomez et al., Phys. Rev. Lett. 113, 155003 (2014)] and earlier experiments of compressed plasma in tokamaks. MIF shares the same principle of magnetic compression and physical process as HGHF tokamak plasma suggested in [Li. G., Sci. Rep. 5, 15790 (2015)], although they are operated at opposite extremes in density and time scale. In an energy confinement time, the two should have similar physical process in different time scale  $\boxtimes$  MIF in ns scale and LCF in 10ms to several seconds scale. Scales of pulse power are discussed for fusion ignitions with LCF and MIF. In LCF case, a plasma current below 6 MA is found to reach ignition by HGHF with the extended Ohmic region.

Author: LI, GE (Institute of Plasma physics, CAS)

Presenter: LI, GE (Institute of Plasma physics, CAS)

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