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【711】 Athos: The Soft X-ray Line of SwissFEL

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The soft X-ray line of SwissFEL, Athos, is designed to extend the present capability of the existing FEL facilities. Several new operating modes will be tested to allow greater control over the bandwidth, pulse length and synchronisation. After a brief overview of the entire facility, the layout of the Athos line will be presented and the new operating modes described in detail: starting from the baseline optical klystron configuration, up to the very large ($> 10\%$) bandwidth mode which requires the implementation of transverse gradient undulators (TGU). The technical solutions, focusing on the innovative design of the new Apple X undulators, will be finally discussed.

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