

# Target studies for the International Muon Collider Collaboration

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The International Muon Collider Collaboration (IMCC) is studying a multi-TeV muon collider. One of the most challenging aspects is the MW-class production Target, which must withstand nanosecond-scale and high-intensity proton bunches, while delivering optimal pion-muon yields from the start of the frontend. In addition to the high thermal shock and average power, resistance to fatigue and irradiation damage must be addressed. The influence of the capture solenoid field and stringent space constraints are also to be considered. This talk presents an overview of the Muon Collider frontend layout, key specifications and challenges, and the three Target technology options currently under study.

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