

# Crabbing cavity system development for International Linear Collider

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The International Linear Collider requires a crabbing system to increase the luminosity of the colliding electron bunches. The ILC has a large crossing angle that requires compensation in order to meet the luminosity requirements. There are several frequency options proposed for the crabbing cavity design. Two crab cavity designs were selected to be prototyped in the pre-lab phase, following the Down Selection Review on Crab Cavity Design held in April 2023. The two rf designs selected are the 1.3 GHz rf-dipole cavity and the 2.6 GHz QMiR cavity. We will be presenting the electromagnetic and mechanical design details of the two compact crabbing cavity designs.

## Footnotes

## Funding Agency

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