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## New design techniques on matching couplers for travelling wave accelerating structures

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Numerical optimizations on couplers of the traveling wave accelerating structures usually require lots of calculation resources. This paper proposes a new technique for matching couplers to an accelerating structure in a more efficient way. It combines conventional Kroll method with improved Kyhl method, thereby simplifying the tuning and simulation process. We will present the detailed design of a constant-gradient C-band accelerating structure based on this new method.

### Footnotes

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### Paper preparation format

### Region represented

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