A next-generation trapped ion quantum computing system

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 $^{171}\mathbf{Yb}^{+}$ qubit

 $^{171}\mathbf{Yb}^+$ coherent manipulation

1st generation EURIQA system

2nd generation EURIQA system

2nd gen EURIQA: Pheonix trap

2nd gen EURIQA: Raman geometry

2nd gen EURIQA: New Yb atom source

2nd gen EURIQA: Improved vacuum

2nd gen EURIQA: Raman beam path

2nd gen EURIQA: CW lasers

2nd gen EURIQA: status and first ion