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## Observation of $e^+e^-$ to $\chi_{c1}$ at BESIII

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In electron-positron annihilation, the process of  $e^+e^- \rightarrow \chi_{c1}$  can occur via the production of two virtual photons or through neutral current, therefore being suppressed with respect to the normal annihilation process via one virtual photon. Using a dedicated scan sample around the  $\chi_{c1}$  mass, the direct production of  $\chi_{c1}$  has been established for the first time in experiments. This provides a new approach for the study of the internal nature of hadrons.

### Collaboration

BESIII

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