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## Studies of the $K_4$ decay at NA48

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The NA48/2 experiment has recently published a detailed study of the  $K_4$  decay mode  $K \rightarrow \pi^0 \pi^0 e \nu$  based on 65000 candidates with a low 1% background contamination. The achieved experimental precision brings evidence for isospin breaking mass effects and final state  $\pi \pi$  scattering. Theoretical calculations will have to face a new precision challenge when using such improved inputs to extract for example low energy constants of Chiral Perturbation Theory.

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