Title:	First test of lepton flavor universality in the charmed baryon decays Ω 0 c → Ω − ℓ + ν ℓ using data of the Belle experiment
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Abstract:	We present the first observation of the Ω 0 c → Ω − μ + ν μ decay and present measurements of the branching fraction ratios of the Ω 0 c → Ω − ℓ + ν ℓ decays compared to the reference mode Ω 0 c → Ω − π + , (ℓ = e or μ). This analysis is based on 89.5 fb − 1 , 711 fb − 1 , and 121.1 fb − 1 data samples collected with the Belle detector at the KEKB asymmetric-energy e + e − collider at the center-of-mass energies of 10.52 GeV, 10.58 GeV, and 10.86 GeV, respectively. The Ω 0 c signal yields are extracted by fitting M Ω ℓ and M Ω π spectra. The branching fraction ratios B (Ω 0 c → Ω − e + ν e) / B (Ω 0 c → Ω − π +) and B (Ω 0 c → Ω − μ + ν μ) / B (Ω 0 c → Ω − π +) are measured to be 1.98 ± 0.13 (stat) ± 0.08 (syst) and 1.94 ± 0.18 (stat) ± 0.10 (syst) , respectively. The ratio of B (Ω 0 c → Ω − e + ν e) / B (Ω 0 c → Ω − μ + ν μ) is measured to be 1.02 ± 0.10 (stat) ± 0.02 (syst) , which is consistent with the expectation of lepton flavor universality.
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