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Thomas Creutzig, Naoki Genra* (genra@ualberta.ca) and **Shigenori Nakatsuka**. *New Duality in W -algebras*.

We prove duality isomorphisms between Heisenberg cosets of subregular \mathcal{W} -algebras of type A and Heisenberg cosets of principal \mathcal{W} -algebras of type super A for generic level. The simplest case is the isomorphism between the parafermion vertex algebra and the Heisenberg coset of the $N = 2$ superconformal vertex superalgebra. We also prove the similar duality for type B and type super C . These results may be interpreted as generalizations of Feigin-Frenkel duality in the context of S-duality by Creutzig-Gaiotto. (Received September 06, 2019)