Hui Wang\* (huiwang@math.rutgers.edu), Department of Mathematics, Rutgers University, 110 Frelinghuysen Road, Piscataway, NJ 08854. A semilinear singular Sturm-Liouville equation involving measure data.

We consider a semilinear singular Sturm-Liouville equation involving measure data. More precisely, it is a second order ODE on the interval (-1,1) in the divergence form, with the leading coefficient taking zero value at the origin, with a power nonlinearity and with a bounded Radon measure as the right-hand side. We answer the questions of the existence, nonexistence, uniqueness, and non-uniqueness of the solution(s). We also classify the isolated singularity at 0. (Received August 03, 2013)