Marcello Lucia*, mathematics department, College of Staten Island at CUNY, 2800 Victory Blvd, New York, NY 10314. One-dimensional symmetry for some nonlinear problems on the torus.

On the torus we consider the nonlinear problem

$$-\Delta u = \lambda (e^u - 1)$$

We prove that below a critical value of the parameter, the solutions depend only on one variable. (Received January 19, 2015)