## 1138-35-147 **Tatsuki Kawakami\*** (kawakami@math.ryukoku.ac.jp), Department of Applied Mathematics, and Informatics, Ryukoku University, Otsu, Shiga 520-2194, Japan. A semilinear elliptic equation with a dynamical boundary condition.

We consider the nonnegative solution of a semilinear elliptic equation with a dynamical boundary condition. In this talk we treat the two unbounded domains

(i) the N-dim half space,

(ii) the exterior of the unit ball,

and discuss results on existence, nonexistence and large-time behavior of small solutions. Furthermore, we show that local solvability of problem is equivalent to global solvability of problem and solvability of the stationary problem. This talk is based on the joint work with M. Fila (Comenius Univ.) and K. Ishige (Univ. of Tokyo). (Received February 07, 2018)