1085-60-45   **Enrique Thomann*** (`thomann@math.oregonstate.edu`), Department of Mathematics, Kidder Hall, 370B, Oregon State University, Corvallis, OR 97331, **Thilanka Appuhamillage**, OR, **Vrushali Bokil**, OR, **Edward Waymire**, OR , and **Brian Wood**, OR. *Local Time and Interfacial Phenomena.*

A variety of problems from biological and geophysical sciences naturally lead to consideration of the effect of sharp interfaces in macroscopic quantities such as for example, residence time and first passage time. In this talk we will illustrate the relation between properties of local time and different interface conditions. The notion of 'natural' local time will be introduced and continuity properties of this local time will be discussed. (Received August 20, 2012)