Waiting time effects for the wearing process of a non-convex stone

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We investigate evolution of a non-convex stone by the wearing process. Following the formulation introduced by Ishii and Mikami (2001, 2004), we study the unique viscosity solution of a nonlocal Gauss curvature flow equation describing the wearing process. We prove that waiting time effects occur on an appropriate subset in a cavity of the stone, that is, any point on the set does not move at all for some positive time. This talk is based on a joint work with Mr. Ryosuke Takahashi.