Allami Benyaiche, Salma Ghiate
Martin boundary associated with a system of PDE

Abstract: In this paper, we study the Martin boundary associated with a harmonic structure given by a coupled partial differential equations system. We give an integral representation for non negative harmonic functions of this structure. In particular, we obtain such results for biharmonic functions (i.e. $\triangle^2\varphi = 0$) and for non negative solutions of the equation $\triangle^2\varphi = \varphi$.