ON BOUNDARY DOMINATION IN THE JENSEN–MERCER INEQUALITY

IVAN PERIĆ

Abstract. The main purpose of this, mainly expository, paper is to give various arguments that the boundary domination is a crucial property for the Jensen-Mercer inequality. Although this is an obvious property of convex functions and it is already expressed in the Jensen inequality it seems that the Jensen-Mercer inequality contains this information in a more vivid, explicit sense. This domination is presented using Steffensen-Popoviciu measures, The Majorization Theorem and a crude domination of weights of vertices in the multidimensional case (polytopes, simplices).


Keywords and phrases: Jensen-Mercer inequality, Jensen inequality, Steffensen-Popoviciu measures, Majorization Theorem, functionals, polytopes.

REFERENCES