GENERALIZATION AND SHARPNESS OF
FINSLER–HADWIGER'S INEQUALITY AND ITS APPLICATIONS

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Abstract. In this paper, the following generalization and sharpness of Finsler-Hadwiger's inequality is established

$$\sum a^\lambda \geqslant 2^\lambda 3^{1-\frac{\lambda}{4}} F^{\frac{\lambda}{2}} + \sum |a-b|^\lambda + \sum_{n=1}^{m} \sum |a_n - b_n|^\lambda .$$

As consequence, an exponential Finsler-Hadwiger type inequality for tetrahedron is derived.

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ⓒ ELEM, Zagreb
Paper MIA-09-40

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