

**RIGIDITY AND FLATNESS OF THE IMAGE OF  
2-DIMENSIONAL  $\infty$ -HARMONIC MAPS**

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The  $\infty$ - Laplace PDE system is the “Euler-Lagrange equation” of the supremal functional  $E_\infty(u, \Omega') = \|Du\|_{L^\infty(\Omega')}$ ,  $\Omega' \Subset \Omega$ . The latter is the prototypical example of vectorial Calculus of Variation  $L^\infty$ . In this talk I will present a new result about  $\infty$ -Harmonic maps  $u : \mathbb{R}^2 \rightarrow \mathbb{R}^N$  in separated variables showing that their images are flat and contained in an affine plane. This is based on joint work with Birzhan Ayanbayev and Nikos Katzourakis.