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Filling holes using a mesh of filled curves

M.A Fortes[1], **P. González**[1], **A. Palomares**[1], **M.L. Rodríguez**[1]

SUMMARY

The objective of this talk is to fill graphics of surfaces with holes-meeting shape conditions, i. e., we want to determine values of a surface inside a hole -where it is not defined- by means of its values outside the hole -where it is properly defined- in such a way that the final reconstructed surface be fair and smooth enough. The procedure considered to get this aim is based on a one-dimensional hole-filling problem, leading to a kind of "wireframe" surface. We develop the theoretical aspects of the problem and we show some graphical examples to illustrate the proposed method.

Keywords: Filling holes, minimal energy, Powell-Sabin

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[1]Department of Applied Mathematics
University of Granada, Spain
email: {mafortes, prodelas, anpalom, miguelrg}@ugr.es