

The bi-Laplacian with intermediate boundary conditions and oscillations of the boundary

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We consider the bi-laplace operator with intermediate boundary conditions and analyze its behavior when the boundary presents some oscillations. We will show that there is a critical oscillatory behavior and that the limit problem depends on whether we are above, below or just sitting on this critical value. We will obtain the limit problem in the three cases. In the critical case, we will show that certain "strange term" appears in the equation. This is a joint work with Pier Domenico Lamberti from University of Padova, Italy.

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