

Asymptotic behaviour of solutions to transmission problems for elastic beams.

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In this talk, we consider transmission problems describing dynamics of elastic beams consisting of two parts with different elastic properties. In particular, we investigate the full von Karman model and the Bresse model for arch beams. We prove the properties sufficient for existence of global attractors, namely, the gradient structure and asymptotic smoothness. For the Bresse model we also investigate limiting situations as the curvature of the beam tends to zero both for finite time intervals and in the sense of upper-semicontinuity of attractors.