ABSTRACT:

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An anisotropic FEM problem will be dealt with. We propose to use different types of elements on a cantilevered beam problem, probably hybrid elements to reproduce the results obtained in the benchmark problem in [1]. We also want to extend this to an axis-symmetric case where the beam problem is extended to a plate. The idea is to simulate a concrete column wrapped in a protective layer. The concrete matter is surrounded by an anisotropic material designed to absorb the impact of a lateral force by propagating the stresses circumferentially.