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A finite element approximation for the complex geometry of the carotid artery

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ABSTRACT.

Given a parametric model of a tubular object-a generalized cylinder with elliptical or cylindrical cross-section combined with a deformable model, an alternative finite element method is used-the so called web-method in order to provide an approximate solution over all elements. This is obtained by assuming a weighted function to relate internal values on the constructed grid.

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