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Large Amplitude Solitary Waves in a Fluid-Filled Elastic Tube

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Abstract: By using the potential method to a fluid filled elastic tube, we obtained a solitary wave solution. Compared with reductive perturbation method, this method can be used for larger amplitude solitary waves. The result is in agreement with that of small amplitude approximation from reductive perturbation method when the amplitude is small enough.

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Key words: soliton, potential method

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