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Bubble universe from flat spaces

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We show by matching two flat spaces one in Minkowski coordinates (empty space) and the other in Minkowski coordinates after a special conformal transformation (also empty space) through a bubble with positive and constant surface tension, that the motion of the bubble is hyperbolic. If the surface tension is very big the initial size of the bubble is as small as we wish, so that we can indeed obtain an infinite universe out of empty spaces. The induced space in the bubble is de Sitter type.

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