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Martha P. Dussan* (dussan@ime.usp.br) and **Martin Magid**. *Solutions of Björling Problem for timelike surfaces and the homogeneous wave equation.*

We solve the Björling Problem for timelike surfaces in the Minkowski space \mathbb{R}_1^3 and \mathbb{R}_1^4 by obtaining a split-complex representation formula for those surfaces. Our approach includes the construction of split-holomorphic extensions, in a natural way, using the point of view of solutions to the homogeneous wave equation. Then we establish Schwarz reflection to obtain split-complex Björling representations in symmetric domains of the split-complex plane. (Received September 21, 2015)