

## FROM GRAPHS TO TENSEGRITY STRUCTURES: GEOMETRIC AND SYMBOLIC APPROACHES

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### *Abstract*

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A form-finding problem for tensegrity structures is studied; given an abstract graph, we show an algorithm to provide a necessary condition for it to be the underlying graph of a tensegrity in  $\mathbb{R}^d$  (typically  $d = 2, 3$ ) with vertices in general position. Furthermore, for a certain class of graphs our algorithm allows to obtain necessary and sufficient conditions on the relative position of the vertices in order to underlie a tensegrity, for what we propose both a geometric and a symbolic approach.

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