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Eliana M Duarte*, 1409 W. Green Street, Urbana, IL 61801, and **Hal Schenck**. *Tensor product surfaces and linear syzygies*.

A tensor product surface is the image of a rational map $\mathbb{P}^1 \times \mathbb{P}^1 \rightarrow \mathbb{P}^3$. Such surfaces arise in geometric modeling and in this context it is useful to know the implicit equation of the closure of the image. In this talk I will explain how the existence of a linear syzygy between the defining polynomials of the map is sufficient to obtain its implicit equation. (Received August 30, 2015)