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Nathan Pflueger* (pflueger@math.harvard.edu). *Exceptional linear series on curves.*

Brill-Noether theory studies the existence and deformations of curves in projective spaces; its basic object of study is $\mathcal{W}_{d,g}^r$, the moduli space of smooth genus g curves with a choice of degree d line bundle having at least $(r+1)$ independent global sections. The Brill-Noether theorem asserts that the map $\mathcal{W}_{d,g}^r \rightarrow \mathcal{M}_g$ is surjective with general fiber dimension given by the number $\rho = g - (r+1)(g-d+r)$, under the hypothesis that $0 \leq \rho \leq g$. One may naturally conjecture that for $\rho < 0$, this map is generically finite onto a subvariety of codimension $-\rho$ in \mathcal{M}_g . This conjecture fails in general, but seemingly only when $-\rho$ is large compared to g . I discuss a proof that this conjecture does hold for at least one irreducible component of $\mathcal{W}_{d,g}^r$, under the hypothesis that $0 < -\rho \leq \frac{r}{r+2}g - 3r + 3$. (Received September 16, 2013)