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Conformal blocks from vertex algebras on $\overline{\mathcal{M}}_{g,n}$

In this talk we will see how representations of Lie algebras or, more generally, modules for a *nice* vertex operator algebra, can be used to define sheaves of conformal blocks on moduli spaces of curves. Under certain assumptions, which I will briefly discuss, these sheaves are locally free and we can explicitly compute their Chern classes via Cohomological Field Theory. This is based on joint work with A. Gibney and N. Tarasca.