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Logarithmic compactification of the Abel-Jacobi section

Given a smooth curve with weighted marked points, the Abel-Jacboi map produces a line bundle on the curve. This map fails to extend to the full boundary of the moduli space of stable pointed curves. Using logarithmic and tropical geometry, we describe a modular modification of the moduli space of curves over which the Abel-Jacobi map extends. This recovers the double ramification cycle, as well as variants associated to differentials. This is joint work with Jonathan Wise.