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Implies PD.

For several decades, connecting determinacy axioms to large cardinals was a core goal for many set theorists. Martin and Steel's 1989 proof of projective determinacy from the existence of infinitely many Woodin cardinals with a measurable cardinal above marked a critical advance in this effort. However the first proof of **PD** from large cardinal axioms was known several years earlier, but was never published.

The purpose of this talk is to outline Woodin's 1984 proof of **PD** from \mathbf{I}_0 . Of central importance is the construction of different representations of sets of reals from trees of certain elementary embeddings $j : L_\lambda(V_{\lambda+1}) \rightarrow L_\lambda(V_{\lambda+1})$, for λ the supremum of the critical sequence of j . We focus in particular on the techniques as they differ from those employed in Martin-Steel. Time permitting, we shall discuss how the same techniques extend to a proof of $\mathbf{AD}_{L(\mathbb{R})}$ and the determinacy of the universally Baire sets. (Received September 22, 2017)