

Abstract Submitted  
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**Near Threshold Resonant Processes in Plasmas** FRANCIS ROBICHEAUX, Auburn University, STUART LOCH, CONNOR BALLANCE, MITCH PINDZOLA — We present a theoretical reformulation of near threshold processes in plasmas that will, in many circumstances, greatly decrease the uncertainty of the calculation. An example process is dielectronic recombination where an electron collides with an ion so that it is captured into a resonant state and then is subsequently stabilized by the emission of a photon. In many situations, a low energy resonance can cause anomalously large possible errors in the calculation because the uncertainty in the resonance energy could cause a resonance to be classified as a bound state (or a bound state to be classified as a resonance). We will present a formulation of near threshold processes that could remove much of this computational uncertainty.

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