

NEW RESULTS OF THE UNRESOLVED TRANSITION ARRAYS METHOD

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The formulas for mean wavelengths and widths of Unresolved Transition Arrays (UTA)[1,2], have been extended to include spectator electrons and jj transitions. These were used to interpret several sorts of satellite spectra, e.g., $3d^{10}n\ell^q - 3d^9 4fn^q$ transitions in atoms Tm thru W from laser produced plasmas, and $3d^m 4s - 3d^{m-1} 4p4s$ in Mo and Pd spectra. The Unresolved Character of the UTA will be discussed thanks to an evaluation of the number of lines in the array. This will be applied to 4d-4f transitions in Ionized Rare Earths.

REFERENCES

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