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Interference effects on lifetimes in low-Z Ni-like ions.

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Domain : Other

We report in Multi-configuration Dirac-Hartree-Fock calculations for forbidden lines in Ni-like ions. As reported elsewhere(see poster by M.Andersson et al at this conference), some systems in this isoelectronic sequence show an interference effect between M3 and hyperfine induced E2-transitions, resulting in lifetimes depending on the magnetic quantum number M_F . In this poster we investigate the lower-end of the sequence, where correlation is important, but the relativistic effect smaller.

[1] Reference 1

[2] Reference 2