

A novel information criterion based on the principle of minimum Fisher information (1) is presented in order to locate resonant wavelengths at which field enhancement (2) occurs in the interaction of electromagnetic beams with finite lamellar gratings. A comparison with the results obtained using Maxwell equations is done. Nevertheless both theories agree well we show the former method is numerically more efficient and reliable and based on a novel interpretation of the physics involved.

#### References

- (1) B. Roy Frieden. "Physics from Fisher information a unification", Cambridge University Press, 1998.
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