



Physics > Optics

Analytical Approximations of Whispering gallery Modes in Anisotropic Ellipsoidal Resonators

Marco Ornigotti, Andrea Aiello

(Submitted on 11 Jul 2011)

Numerical evolutions of whispering gallery modes of both isotropic and anisotropic spheroidal resonators are presented and used to build analytical approximations of these modes. Such approximations are carried out mainly to have the possibility to have a manageable analytic formulas for the eigenmodes and eigenfrequencies of anisotropic resonators. A qualitative analysis of ellipsoidal anisotropic modes in term of superposition of spherical modes is also presented.

Comments: Submitted to Optics Express

Subjects: **Optics (physics.optics)**

Cite as: [arXiv:1107.2044v1](#) [physics.optics]

Submission history

From: Marco Ornigotti Dr. [[view email](#)]

[v1] Mon, 11 Jul 2011 14:40:25 GMT (1232kb,D)

[Which authors of this paper are endorsers?](#)

Link back to: [arXiv](#), [form interface](#), [contact](#).

Download:

- [PDF](#)
- [Other formats](#)

Current browse context:

[physics.optics](#)

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1107](#)

Change to browse by:

[physics](#)

References & Citations

- [NASA ADS](#)

Bookmark (what is this?)

