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Trimming of imperfect hemispherical shell including point mass distributions

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Highlights

- The frequency trimming of a hemispherical shell with attached mass is investigated by using Love's thin shell theory.
- Rayleigh's energy methodology is applied in order to obtain the eigenfrequency of the imperfect shell model.
- The point masses are expressed with the sum of kinetic energy in order to control the balanced frequency.
- Azimuthal-angular position of imperfection is significant factor when the point mass is nearby the edge of the shell.
- Trimming mass can be calculated explicitly with respect to the position and magnitude of initially attached masses.

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