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Reference: *Free vector: Hand drawn layers of the Earth.* Freepik. (n.d.). https://www.freepik.com/free-vector/hand-drawn-layers-earth_18776469.htm Pixabay. "Pixabay." *Pixabay.com*, 2023, pixabay.com/.



Understanding of wave propagation is fundamental to many key technologies used today!



Waves in solids can be harnessed to detect structural flaws!



Topic: Modelling scalar wave equation in the time and frequency domain



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Overall goal: Understand and learn to simulate scalar waves

in solids

The following is the breakdown of the tasks in the proposed topic:

- Background study: Literature survey of the scalar wave equation solvers
- Code building: a finite element solver to generate waves both in time and frequency domain
- Post processing results: Comparing the results using interesting test cases

