## Elastodynamics Tutorials - Sequential PSD elastodynamic simulations

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## Abstract

This document details some tutorials of elastodynamics module of PSD. These tutorials are not verbose, but does instead give a kick start to users/developers for using PSD's elastodynamics module.

To the same problems above Add -sequential flag to PSD\_PreProcess for sequential solver, but remember to use PSD\_Solve\_Seq instead of PSD\_Solve. So the work flow for the 2D problem would be:

 $\begin{array}{c} {}_{1}\;\mathsf{PSD\_PreProcess}\;\mathsf{-dimension}\;2\;\mathsf{-problem}\;\mathsf{elastodynamics}\;\mathsf{-dirichlet}\mathsf{conditions}\;1\;\mathsf{-traction}\mathsf{conditions}\;1\;\backslash\\ {}_{2}\;\mathsf{-timediscretization}\;\mathsf{newmark\_beta}\;\mathsf{-postprocess}\;\mathsf{uav}\;\mathsf{-sequential} \end{array}$ 

Once the step above has been performed, we solve the problem using the given mesh file bar-dynamic.msh.

PSD\_Solve\_Seq -np 2 Main.edp -mesh ./../Meshes/2D/bar-dynamic.msh -v 0

Similarly try out the 3D problem as well.