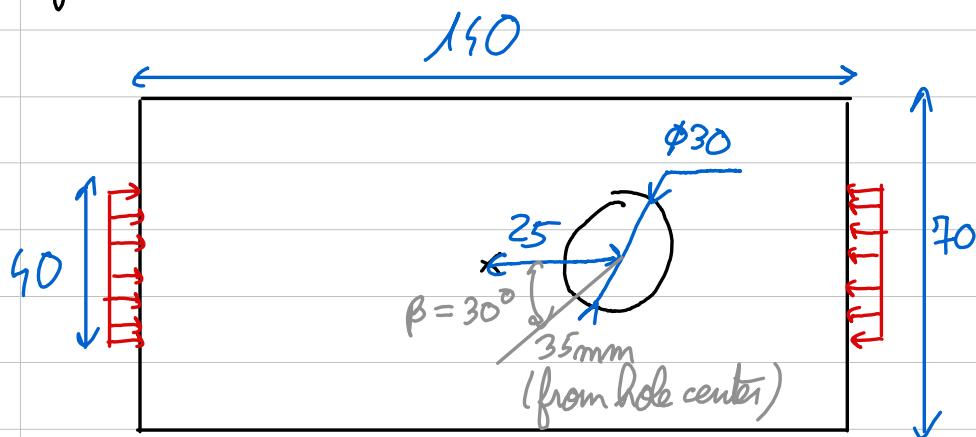


Mixed-mode PMMA by Pethoré (2018)

This small document covers the mesh creation for this example. Let us start by setting up the geometry of the specimen.

GEO



x is the center thickness = 10 mm

Figure 1: Geometry of the specimen

MAT

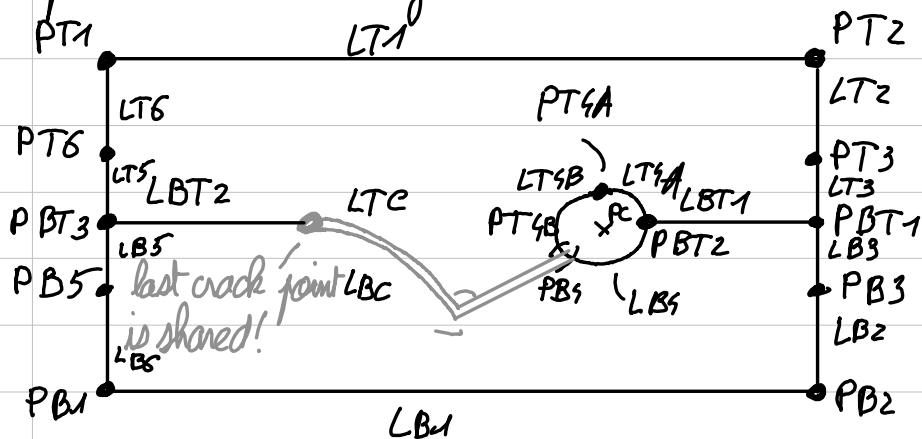
The material properties of the PMMA are: (perspex)

$$E = 5 \text{ GPa}, \nu = 0.32, G_c \approx 430 \text{ J.m}^{-2}$$

assumed!

MESH

To define the mesh, we need to split it into two parts (as used with `grock`):



- no duplicate point \Rightarrow duplicated points

2- points and lines in gray \rightarrow in crack