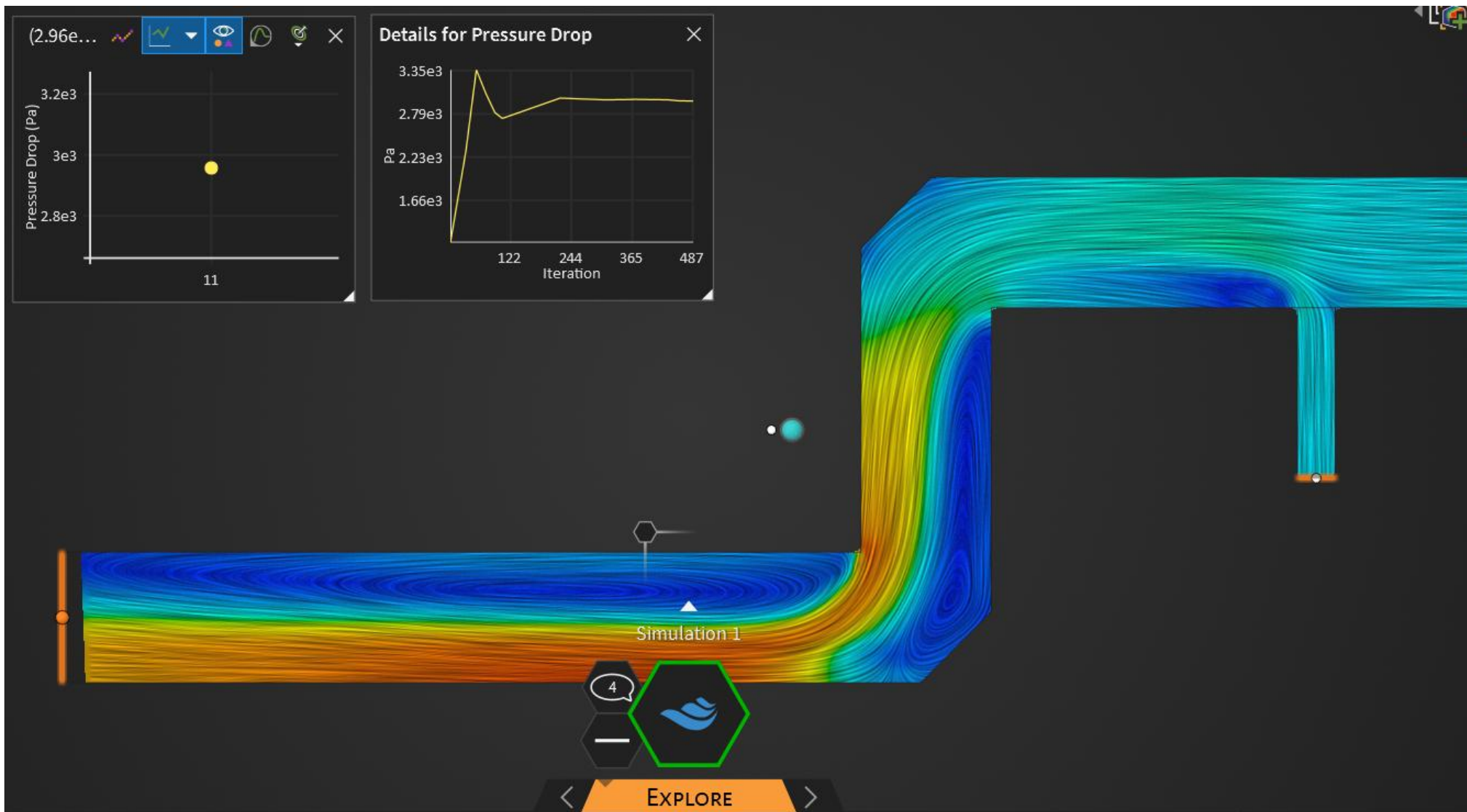


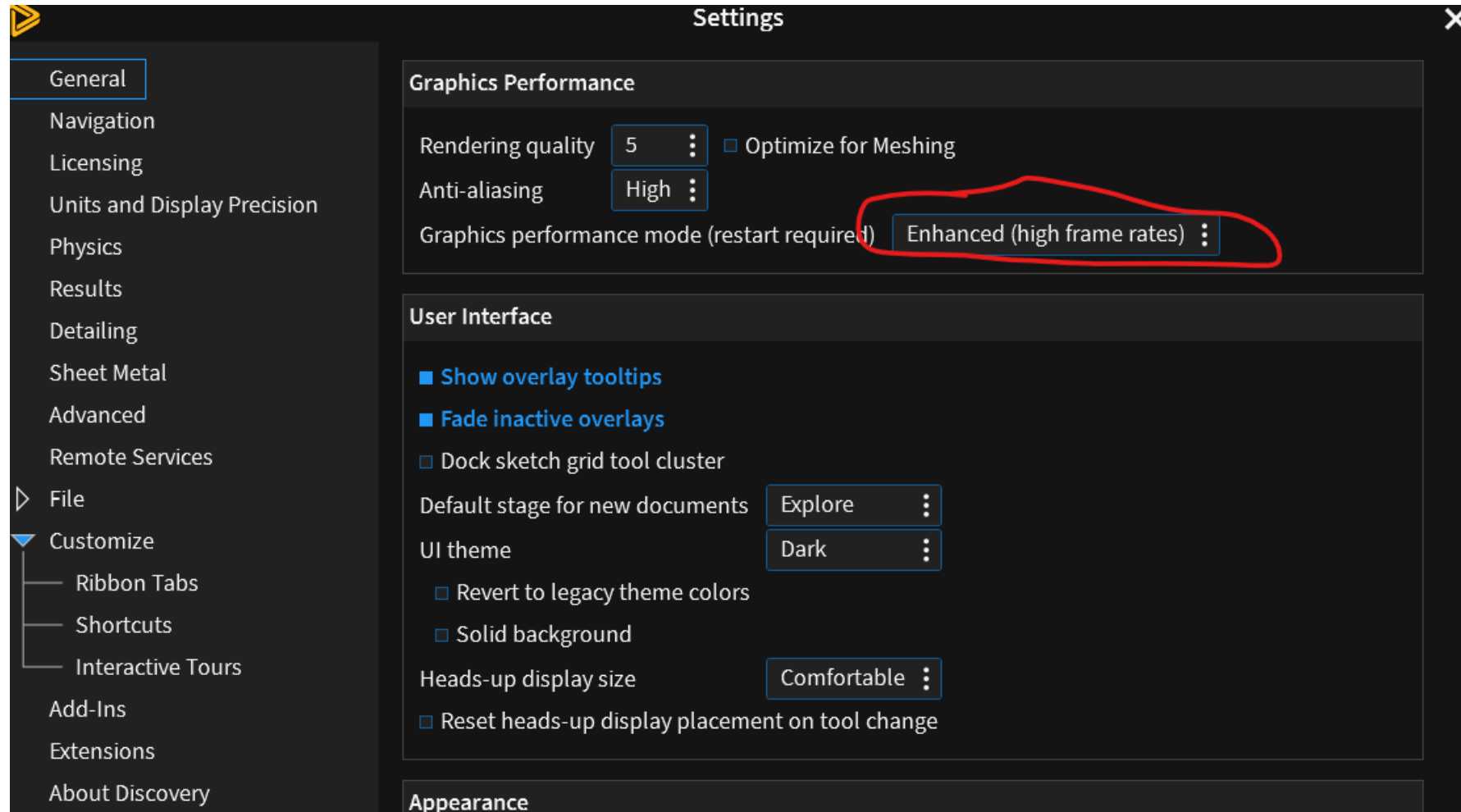


# Nové možnosti v Ansys Discovery pro oblast proudění

Radim Burda

**SVS FEM**

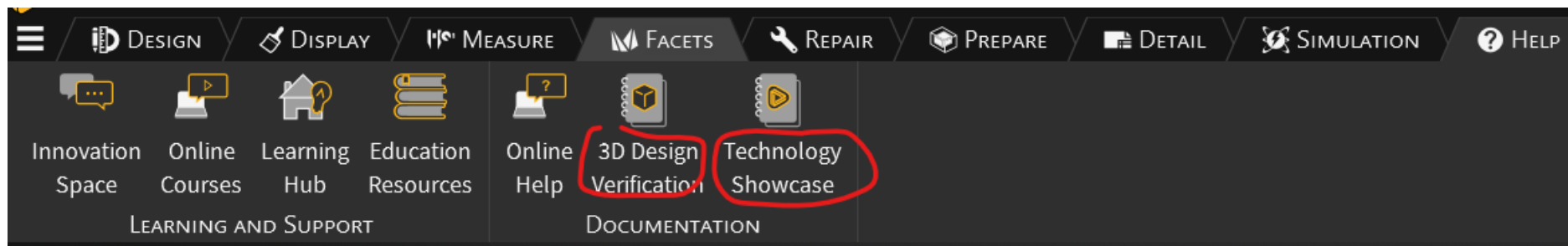


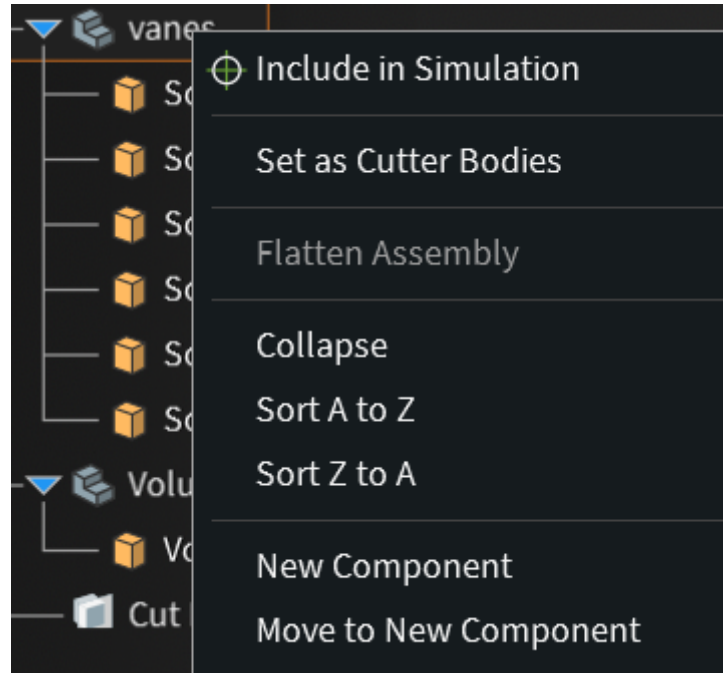


# Beta options

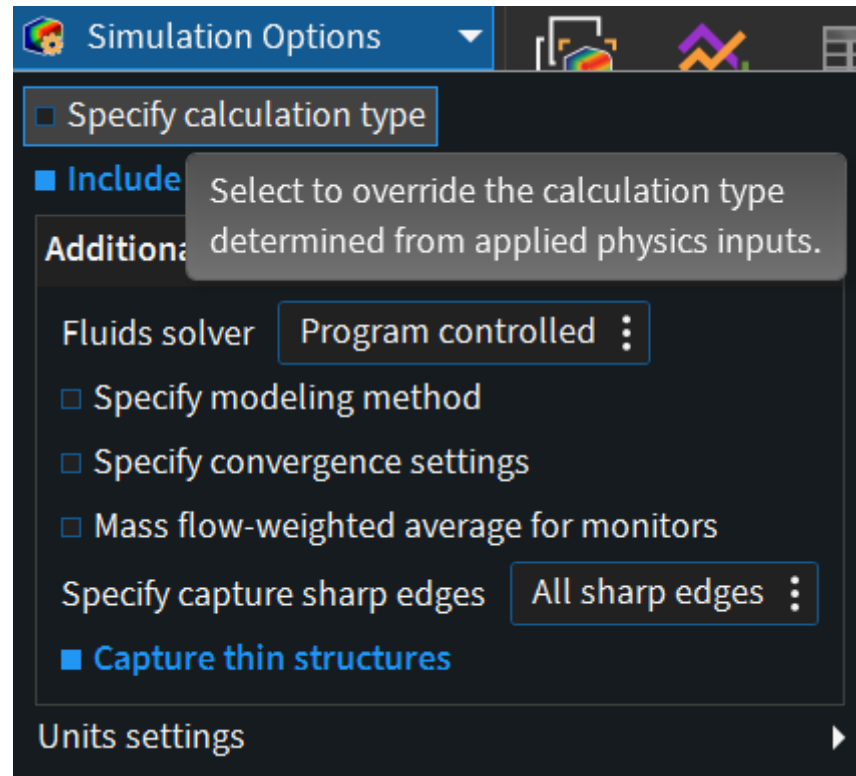
The screenshot shows the 'Settings' dialog box in Ansys Discovery. The 'Advanced' tab is selected in the left sidebar. The 'Beta Options' section is highlighted with a red bracket and contains the following options:

- Lightweight bodies for physics (restart required)
- Allow overlapping contacts and interfaces in Refine (restart required)
- CAD-based tolerant volume extract
- Upgrade parameters
- Remote solving with Ansys HPS (restart required)
- Prism boundary layer mesh control for fluids in Explore
- Perform design variations optimization analysis (restart required)
- Search in user settings
- Updated annotations
- Discovery Copilot (restart required)





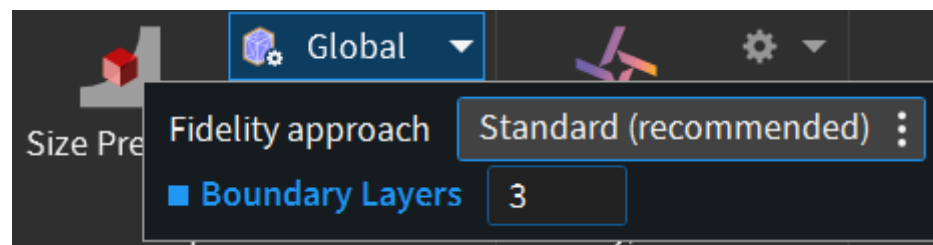
# Capture thin structures + sharp edges



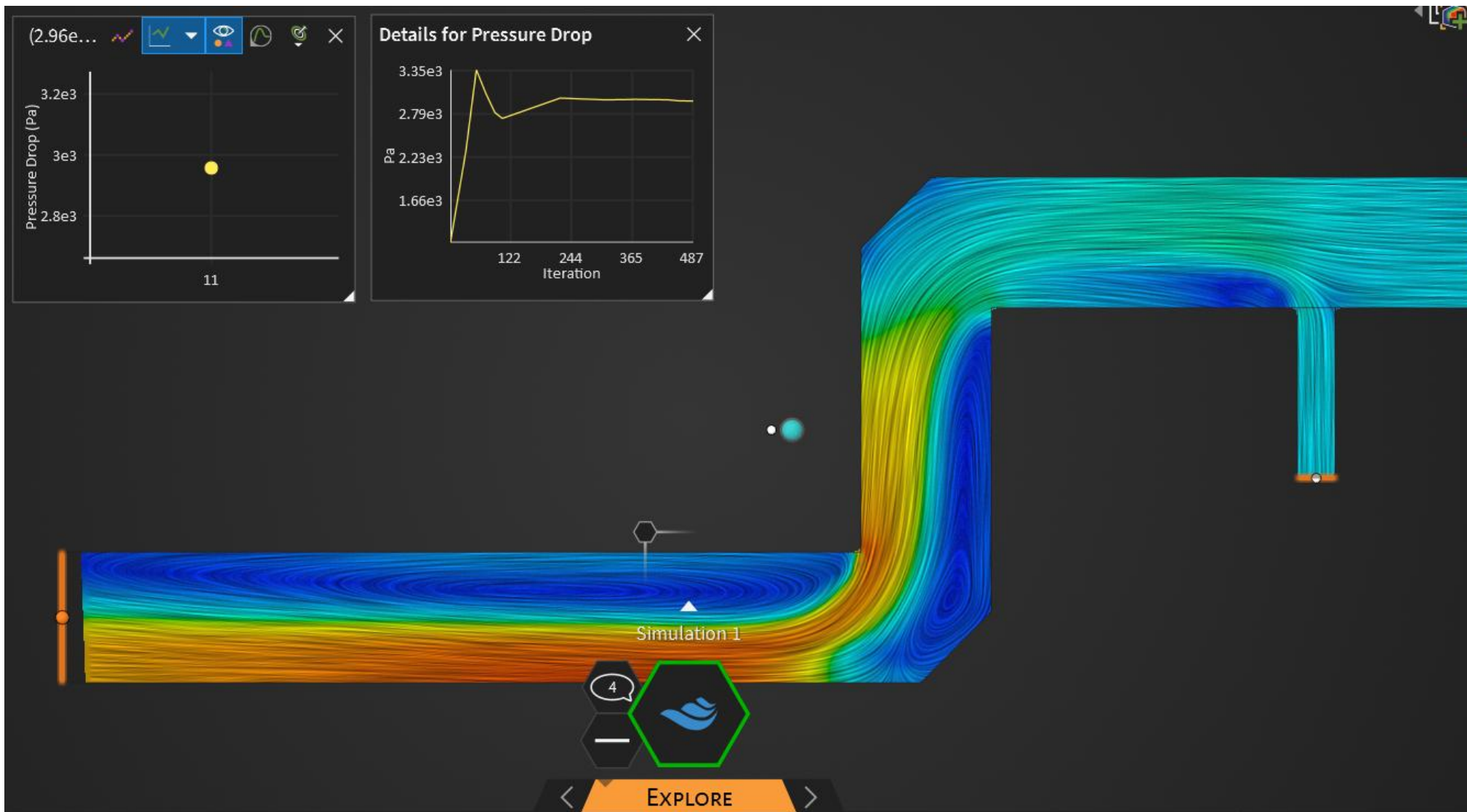
**Capture thin structures** (Explore only)

Accurately represents mesh areas with thicknesses smaller than the local size, resulting in anisotropic cells in these thin regions and reducing the total cell count. Stretched (anisotropic) cells are created along thin directions, which can help lower the cell count compared to isotropic refinement. If this option is not enabled, isotropic cells are generated and very thin regions are merged or overlooked, possibly leading to a loss of detail.

# Boundary layer control



# Convergence monitoring

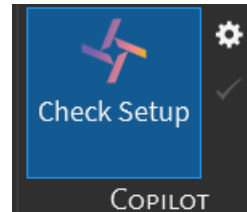


Parameter Study

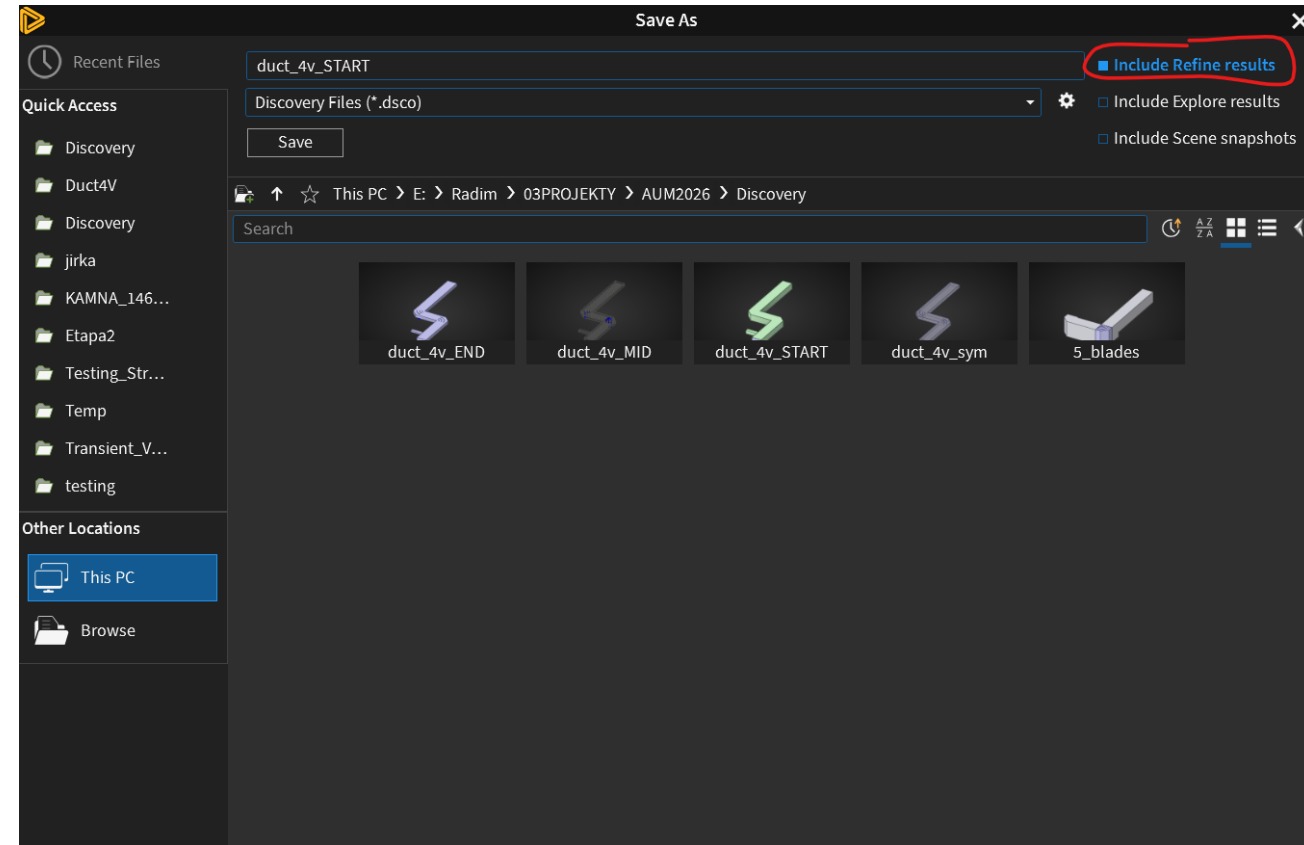
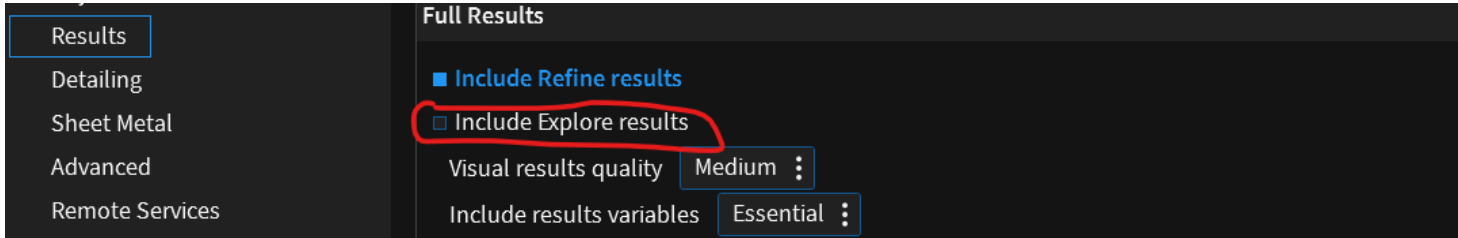
PARAMETERS TEST CASES VARIATIONS

		★	Name	Flow Inlet 4,...	Flow Inlet 5,...	Flow Inlet 4,...	Flow Inlet 5,...	Parameter 1	Paran
1	ⓘ	☆	DV51	2 m/s	2 m/s	10 °C	30 °C	30 °	30 °
2		☆	DV2	2.06 m/s	7.84 m/s	10.2 °C	31.1 °C	0.38 °	0.34
3		☆	DV3	5.75 m/s	9.76 m/s	32.8 °C	21.6 °C	36.65 °	25.8!
4		☆	DV4	9.38 m/s	2.52 m/s	26.8 °C	17.2 °C	6.37 °	24.5'
5		☆	DV5	6.35 m/s	8.61 m/s	16.2 °C	39.8 °C	3.9 °	28.3
6		☆	DV6	2.9 m/s	6.88 m/s	25 °C	32.7 °C	34.98 °	25.2:
7		☆	DV7	2.28 m/s	5.66 m/s	34 °C	28.5 °C	4.75 °	4.22
8		☆	DV8	6.26 m/s	3.67 m/s	13 °C	39.1 °C	10.43 °	34.4

0 0 0 0 1 — 51 Reset ⓘ



# Save results





**Díky za pozornost  
a zůstaňme ve spojení**

 Radim Burda