STEP 1 — A little history

Short History of GRIT

- The original idea of mixing implicit level-set interface tracking with explicit interface representation using simplicial complexes (triangle mesh) was the sole result of Andreas Bærentzen work.

- The idea where later extended to 3D in the deformable simplicial complex (DSC) method. The work was driven by Marek Misztal during his PhD and later post doc time at DTU. We strongly recommend his thesis as the main background source.

- As one of many demonstrator cases of DSC a multiphase liquid simulation was developed in collaboration between mainly researchers from DTU, UCPH and Alexandra Institute. This lead to a long series of simulation papers exploring and improving the DSC method. We perceive this work as helping mature the DSC method.

- After many years of experience with DSC the simulation researchers at UCPH meet the performance barrier of DSC in the simulation needs. This was the birth of GRIT. A parallel GRIT was first prototyped by master thesis student Mark Jensen.