## SPH Simulations towards the exascale

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## Résumé

We will present the features of SHAMROCK, a SPH code designed for massivelly parallel CPU/GPU architectures. A specific focus will drawn on our novel tree algorithm optimised for modern GPUs & high core count CPUs. A significant speedup is achieved by using binary arithmetics & morton codes, allowing a nearly free recomputation of the tree.

\*Intervenant