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==== Le message d'annonce à transmettre ====

We are happy to announce the opening of registrations to the workshop "Highlights and prospects for numerical astrophysics in France", which will be held in Lyon from Oct. 8 to Oct. 11, 2018.

All details are available on the website : <https://astrosimconf.sciencesconf.org/>
<<https://astrosimconf.sciencesconf.org/>>The deadline for registration and abstract submission is July 15th.

Rational:

High Performance Computing (HPC) has become an essential tool of all fields of astronomy and astrophysics. In particular, numerical simulations have become the tool of choice to carry out quantitative theoretical investigations, which take into account the full complexity of astrophysical objects and their contexts, and reach a level of precision which matches the ever more demanding level of detail achieved with observations. Today, numerical simulations of astrophysical objects have become the principal vector of the dialog between observations and theory, and they have reached a quality which allows us to use them for a direct interpretation of observations (from large-scale cosmological surveys to observations of atmospheric phenomena on the surface of giant planets).

As observations, simulations require high-performance instruments: super-computers. In less than 10 years, there has been a spectacular increase of the gigantic computing power that is now available to researchers, both at the national (through GENCI) and european levels (through PRACE). This is accompanied by profound evolutions of the methods used by specialists of numerical simulations. More and more research projects are now performed in close collaborations with software engineers. With exascale computers coming soon, such a professionalism of high performance computing (HPC) is expected to become more and more frequent. Like the other communities in France, astrophysicists must prepare for that transition.

The aim of this workshop is to bring together researchers working in France in all fields of numerical astrophysics, along with representatives of the HPC infrastructure at the regional, national, and European level, and key players in the forthcoming ExaScale HPC. Invited presentations from astronomers will both highlight astrophysical results and propose a reflexion on the evolutions of their work. Other invited presentations will present the expected evolution of the HPC landscape in France and Europe, both in terms of organisation and of technologies. A large number of contributed talks will complement the program.