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David Andriot, researcher at LAPTh, has been interviewed for the article of Epsilon.

[Epsilon](#) is a scientific outreach magazine created in 2021 that can be found in shops as well as online. In addition to a monthly edition on scientific news, an extra version appears every 3 months, that discusses one science word. The [number 12](#) (october-december 2024) tackles the word "Theory".

One of the articles, written by Clémentine Laurens, deals with research topics of the LAPTh: [The theory of everything](#)

Illustrated with humor thanks to various super heroes discussing this tough problem, sometimes considered as the holy grail of theoretical physics, the article presents motivations, attempts and difficulties faced par researchers working on this theory of everything. The idea there is to obtain a formalism which would unify general relativity (describing gravitation, for instance in cosmology) and quantum mechanics (describing electromagnetism and nuclear forces, for example in particle physics). This would bring not only a general theoretical consistency in physics on these topics, but would also allow to describe some extreme events, like the very early universe or the interior of black holes.

David Andriot, researcher at LAPTh, has been interviewed for the article of Epsilon. He presents there briefly string theory, a serious candidate for such a unifying theory, as well as its advantages. He also discusses obstacles faced in this approach, in particular non-observed ingredients of this theory, for instance extra dimensions, for which one has to find an

explanation. This link to observations, and hints that could be brought by future experiments, in particular in cosmology, are also discussed in the article.