## Workshop

**Antwerp Young Minds – Department of Physics** 

## Julia Workshop Compute the future

Robbe Ceulemans (TQC)

In 2012, the first version of a new programming language called Julia was launched. With a large appreciation for many different coding paradigms, the goals that the founders had set for this new language were, to say the least, ambitious. "We want a language that's open source, with a liberal license. We want the speed of C with the dynamism of Ruby. ... We want something as usable for general programming as Python, as easy for statistics as R, as natural for string processing as Perl, as powerful for linear algebra as MATLAB, ..." [1]. Yet, the first stable version, released only in 2018, had already met most of these objectives. Subsequent releases resulted from the motivation to continuously improve. The result today is an easy-to-use, flexible, and yet performant coding language that is well on its way to become the new standard for scientific computing.

In this workshop we will explore the fundamentals of the Julia language. How is it different from what you use now? What does it offer more? Is it easy to learn? We will cover it all! Following a short introduction, you will have to chance to explore the base functions and commands. Your newly gained insights will come in handy in the second part, where you can apply them to some more advanced examples.

[1] J. Bezanson, S Karpinski, V.B. Shah, and A. Edelman, Why we created Julia, The Julia Language Blog, https://julialang.org/blog/2012/02/why-we-created-julia/, (2012).

Thursday, November 23<sup>rd</sup>
G.Z.521 – 14h-16h





