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Title: PyACTS: Una interface Python para las herramientas ACTS.

Abstract:

Many computational applications rely heavily on numerical linear algebra operations. A good number of these applications are data and computation intensive that need to run in high performance computing environments. The ACTS Collection brings robust and high-end software tools to the hands of application developers. However, this transfer of technology is not always successful due in part to the intricacy in understanding the interfaces associated with the software tools. To alleviate this, here we present a set of Python based interfaces to some of the tools in the ACTS Collection, PyACTS. We illustrate some examples of these interfaces and their performance, and evaluate not only their performance but also how user friendly they are compared to the original calls. Also, some scientific applications, and their numerical results, in which PyACTS has been used are presented.

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