## Centre for High Performance Computing 2021 National Conference



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# Processing longitudinal population data using CHPC

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The South African Population Research Infrastructure Network (SAPRIN) curates longitudinal population data collected by four nodes from a total population of more than 400 000 individuals. Due to the dynamic nature of these study populations data representing episodes of individual surveillance needs to be combined in a way that maintains data integrity and takes into account variations between data collection sites.

We need to deconstruct 4,5 million person years of observation into a day level dataset, requiring the kind of processing and storage capacity provided by a high performance computing environment such as CHPC.

We will describe a data processing pipeline, originally developed in Pentaho and recently converted to the julia programming language which scales well on the CHPC environment.

#### Student?

No

### Supervisor name

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