#### **SAIP2016**



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### The Shear-Free Perfect Fluid Conjecture in General Relativity: Progress

Wednesday, 6 July 2016 15:00 (20 minutes)

# Abstract content <br> &nbsp; (Max 300 words)<br><a href="http://events.saip.org.za/getFile.py/starget="\_blank">Formatting &<br>Special chars</a>

The progress on the proof of the shear-free fluid conjecture in general relativity is discussed, we present a review of recent partial proofs of the conjecture, a new proof is given for the case of a general equation of state, including a non-zero cosmological constant.

#### Apply to be<br> considered for a student <br> &nbsp; award (Yes / No)?

Yes

#### Level for award<br>&nbsp;(Hons, MSc, <br> &nbsp; PhD, N/A)?

PhD

#### Main supervisor (name and email)<br>and his / her institution

Prof. Peter Dunsby, peterdunsby@gmail.com

## Would you like to <br> submit a short paper <br> for the Conference <br> Proceedings (Yes / No)?

Yes

### Please indicate whether<br>this abstract may be<br>published online<br>(Yes / No)

No

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