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## PLENARY: Neutrinos - The X-files of particle physics

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

The neutrino is a very special candidate of all fundamental particles as it barely interacts with matter and is very hard to detect. Over the last decades experimental methods were developed which allows to detect neutrinos on a level that physical properties can be studied in detail. After some historical introduction the talk will focus on the status of direct neutrino mass searches and neutrino oscillations, whose observation proved that neutrinos have a non-vanishing rest mass. These results were awarded with the Nobel price in Physics 2015. A brief view on geo- and astrophysical neutrinos will be given.

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