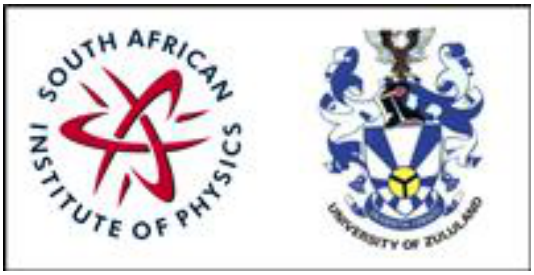

Contribution ID: **215** Type: **Oral Presentation**

First year astronomy students' interpretation of the term "radiation"

Wednesday, 10 July 2013 09:00 (20 minutes)

Abstract content
   (Max 300 words)

One of the difficulties when dealing with issues relating to language is that apparent familiarity with terms can often mask differences between their popular usage and their technical definitions. The result is that while a superficially intelligible exchange might occur between a novice and an expert (or even between experts), their "mental pictures" might be quite different. The present study forms part of a larger project in which we aim to probe students' interpretation of the terms "radiation" and "radioactivity", with a public understanding of science in mind. As part of the piloting phase of the main project we included a question regarding the term "radiation" in a recently designed instrument, the Introductory Astronomy Questionnaire (IAQ), discussed in an accompanying presentation. The IAQ was given to the first year astronomy class at the University of Cape Town prior to instruction. The responses which included short written answers were analysed using an approach suggested by grounded theory. We present results from the preliminary analysis of the data. We also comment on how the term "radiation" is used and defined in various physics textbooks and dictionaries.

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