**Title in 14 pt Bold (all fonts Times New Roman)**

**Name Surname**1,2**, Name2 Surname2**2 **10 pt Bold**

*1 Institution 1, Address in 8 pt*

*2Institution2, Address*

*Corresponding author e-mail address: author@email.ac.za*

**1. Introduction (section 1) 10 pt Bold**

A one page extended abstract in 10 pt must be prepared. Please keep to the format of this template. The presenting author should be underlined. Several sections may be used. The abstract must be sufficiently informative to allow fair evaluation of the intended presentation, otherwise it may not be accepted for the conference. The text should be written in clear and concise English. Keep the abstract in the MS-word format and name it ‘SACPM2025\_Surname\_Initials’ using the surname and initials of the **presenting** author.

Your abstract file and accompanying information must be submitted online using the conference website (<https://events.saip.org.za/event/sacpm2025>). If you have not used the Indico website of the South African Institute of Physics before, then you will need to create an account before being able to log in and submit your abstract.

After logging in, select the menu item "Submit a new abstract" of the conference website. Type in the title for your presentation (not Dr, Prof, etc!), a text-only abstract summary of about 150 words giving a brief idea of the content, and choose a preferred presentation type (oral or poster). Then attach your one page MS-word abstract file and add one primary author as well as any co-authors as necessary. Select the single author who will present the work. Add any comments if you wish.

References and equations must be used as in the following example: the time evolution of the density matrix is given by the Von Neumann equation [1]

|  |  |
| --- | --- |
| $$\frac{dρ\_{ab}}{dt}=\frac{-i}{ℏ}\sum\_{l=1}^{N}\left(ρ\_{lb}I\_{al}e^{iω\_{a,l}t}-ρ\_{al}I\_{lb}e^{-iω\_{b,l}t}\right)$$ | (1) |

where $ω\_{a,b}=ω\_{a}-ω\_{b}$ and $ρ\_{ab}$ gives the elements of the density matrix, $ω\_{a}$ the frequencies of the individual vibrational levels, and $I\_{ab}$ the matrix elements.

**2. Results**

The extended abstract continues - up to two images or graphs may be included. If two images or graphs are used, they must be spaced as in the example below; if only one is used then it must be centred with no text on either side of it.

 

Fig. 2: The best fitness as a function of generation.

Fig. 1: Population dynamics of the various vibrational levels. (in 8 pt)

**3. References**

[1] C. Cohen-Tannoudji, B. Diu and F. Laloë. *Quantum Mechanics* (Wiley-VCH, 2005), Chap. 3.

[2] A. Bauknecht, S. Siebentritt, J. Albert and M. C. Lux-Steiner. *J. Appl. Phys.* **89** (2001) 4391.