**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 given. The presenting author should be underlined. Up to 4 sections may be used. The abstract must be sufficiently informative to allow fair evaluation of the intended presentation. The text should be written in clear and concise English. Your abstract should be sent as an attachment (only one per e-mail) to KroonRE@ufs.ac.za before 14 January 2011. Please enter the following in the subject field of your e-mail: “Abstract for Kariega 2011” and the name and surname of the corresponding author. The e-mail message itself should contain the title of the abstract as well as the name and contact details of the corresponding author (full postal address, telephone and fax numbers, e-mail address).

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**

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 it must be centered 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.