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**Quantum processes as a mechanism in olfaction for smell recognition?<sup>1</sup>**

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The physics of smell is not well understood. The biological processes that occur following a signalling event are well understood (Buck 1991). However, the reasons how and why a signalling event occurs when a particular smell molecule and receptor combination is made, remains un-established. Luca Turin proposes a signalling mechanism which determines smell molecules by quantum mechanics (Turin 1996). Investigation of this mechanism shows it to be physically robust (Brookes, et al, 2007), and consequences of the theory provides quantitative measurements of smell and interesting potential experiments that may determine whether the recognition of smell is a quantum event. Brookes, J.C, Hartoutsiou, F, Horsfield, A.P and Stoneham, A.M. (2007). Physical Review Letters 98, no. 3 038101 Buck, L. ( 1991) Cell, 65, no.1 (4): 175-187. Turin, L. (1996) Chemical Sences 21, no 6. 773-791

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