## P03-33

## BIOPHOTONS, HALLUCINOGENS, AND FLUORESCENCE F. Grass

Biological Psychiatry, Medical Universitiy of Vienna, Wien, Austria

Several experiments show that there is a cell to cell communicaton by light in different cell types. The most convincing experiment shows that baby hamster kidney cells can communicate their spatial orientation through a glass film, this can only happen by photon signals. If so, it can be assumed that the cells with the highest differentiation, the neurons also use this mechanism. The nervous system would have excellent conditions for a cell to cell communication by light. Neurons are large, metabolically very active (lightproducing) cells with wide arborisation, contain little pigment and are protected from ambient light by bone and connective tissue. Signal to noise ratio should be high for photon signals. It has been shown that light can be propagated along the axis tracts. Also the hollow microtubules (neurofibrillae) could act as light guiding structures. According to Jibu et al. their inner diameter of 15nm is ideal for light guidance free of thermal noise and loss. Other findings that may be of importance in this context, are the strong flurescence properties of the major hallucinogens: LSD, bufetonine, dimethyl-tryptamine, psilocybine, psilocin, iboguanin, harmine, cannabidinol and mescaline. Furthermore it has been shown that hallucinogenic properties of these substances have a direct correlation to their fluorescence properties and their readyness to donate electrons. As hypothesis we propose that the fluorescence interacts physically with the proposed Biophoton mediated cell to cell communication thus producing hallucinations. This would be an easy and plausible explanation for the strong hallucinogenic properties of these fluorescent substances.