Abstract Submitted
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Physics of the Brain: Interaction of the Optical-Fiber-Guided Multi-Ultraviolet-Photon Beams with the Epilepsy Topion, (the Seizure Onset Area)¹ V. ALEXANDER STEFAN, Institute for Advanced Physics Studies, Stefan University, La Jolla, California 92037 — A novel method for the possible prevention of epileptic seizures is proposed, based on the multi-ultraviolet-photon beam interaction² with the epilepsy topion, (nonlinear coupling of an ultra high frequency mode to the brain beta phonons). It is hypothesized that epilepsy is a chaotic-dynamics phenomenon: small electrical changes in the epilepsy-topion lead, (within the 10s of milliseconds), to the onset of chaos, (seizure—excessive electrical discharge), and subsequent cascading into adjacent areas.³ The ultraviolet photons may control the imbalance of sodium and potassium ions and, consequently, may prove to be efficient in the prevention of epileptic seizures.

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³H.P. Zaveri et al., Localization-related epilepsy exhibits significant connectivity away from the seizure-onset area, Neurorreport, 20(9), 891-5, Jun17, 2009.

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