

Friday, January 30, 2009

Surdutovich Studies the Physics of Cancer Therapy

Visiting Assistant Professor **Eugene Surdutovich**, of the **Department of Physics**, and an international team of collaborators, recently published "**Physics of Ion Beam Cancer Therapy: A Multiscale Approach**" in **Physical Review E** (Volume 79, Article Number 011909, 2009). The main advantage of using ion beams (such as beams of protons) over traditional methods for treating cancer using X-rays is that ion beams deposit most of their energy at a well-defined point below the tissue surface, called the **Bragg peak**. Thus, ions can better irradiate a deep tumor without damaging the overlying healthy tissue. Surdutovich's paper analyses the fundamental physics of the Bragg peak using an approach that looks at the problem from many length scales.

SUMMARY

Visiting Assistant Professor Eugene Surdutovich, of the Department of Physics, and an international team of collaborators, recently published "Physics of Ion Beam Cancer Therapy: A Multiscale Approach" in Physical Review E (Volume 79, Article Number 011909, 2009).

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