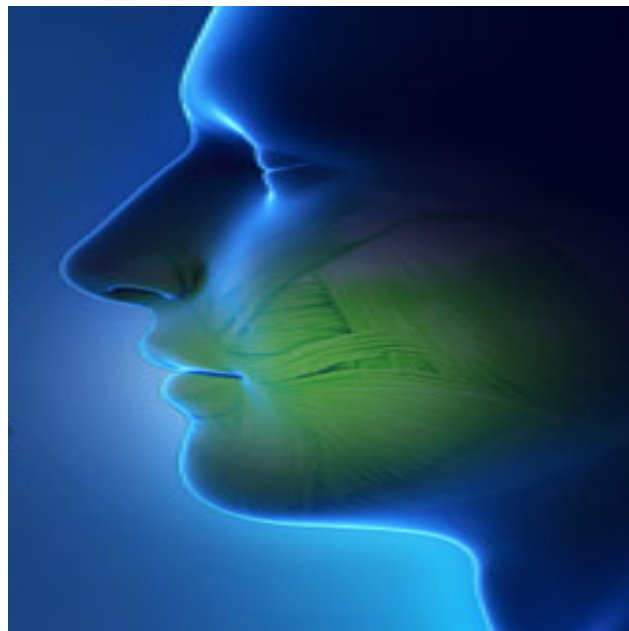


Graduate Math and Physics Seminar

Detect Oral Cancer with a Computer

Dr. Vladimir Makarov
California State University, Channel Islands



Abstract: We use a newly developed feature extraction and classification method to mine public gene expression data sets in Oral Squamous Cell Carcinoma and in healthy tissue in order to find a gene set sufficient for diagnoses. The feature selection technology is based on the relative dichotomy power concept published in 2018. The resulting biomarker panel has 100% sensitivity and 95% specificity, is enriched in genes associated with oncogenesis and invasive tumor growth, and, unlike marker panels devised in earlier studies, shows concordance with previously published marker genes.

When: Monday, April 29, 2019, 6:00 – 7:00 pm
Where: CSUCI, Sierra Hall 2411