

DMNS FAIR

Queens College, City University of New York
Division of Mathematics and Natural Sciences
Faculty Achievement In Research

MY NAME:

Lev Deych

MY DEPARTMENT:

Physics

SOMETHING INTERSTING ABOUT ME (OPTIONAL, MAY BE LEFT BLANK):

MY RESEARCH (IN SIMPLE WORDS THAT CAN BE UNDERSTOOD BY ANYONE ON THE Q64 BUS):

My research is concerned with understanding capabilities of light to move small material objects such as dust particles, viruses, bacteria, atoms. I am interested in understanding fundamental physics of these phenomena and in developing such potential applications as optical mass and size sensors.

Another direction of my research is concerned with possibilities to use confinement of light in small regions of space in order to enhance effects of magnetic field on its characteristics. Using effect of total internal reflection in order to keep light propagating along the perimeter of a circular disk, I study how magnetic field changes its polarization properties.

MY RESEARCH IN 140 CHARACTERS (OPTIONAL, MAY BE LEFT BLANK):

