## 2019 DISTINGUISHED LECTURE SERIES Free and open to the public

State Summer School for Mathematics and Science

## Does the growing population and transition in job market poses a global challenge?

Rajan Gupta, Los Alamos National Labs

## July 31, 2019, ARC Ballroom UC Davis, 1-3pm

This talk will explore a number of challenges associated with population growth in Sub-Saharan Africa, the Middle East and South Asia. These include political instability, depletion of resources, environmental impacts, climate change, migration. How will the rest of the world respond? At the same time the paradigm for manufacturing is shifting. Through the 20th century, countries with cheap but trained labor had a comparative advantage. They could produce goods cheaply and if the transportation cost of the inputs and products was inexpensive, they could compete globally in the mass-produced items. With overcapacity in the current manufacturing hubs such as China, Europe, North America, will countries with large and growing populations be able to compete and create sufficient number of jobs to improve the standard of living and provide hope. The format of the talk will be a combination of a lecture and interactive discussions based on pre-distributed material.

Rajan Gupta is a theoretical physicist and a Laboratory fellow at Los Alamos National Laboratory. He came to the USA in 1975 after obtaining his



Masters and his Ph.D. in Physics. The main focus of his research is to understand the fundamental theories of elementary particle interactions. He has published over 125 research papers and is a fellow of the American Physical Society.

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