



SoFlacs



Vol. 29, No. 6

South Florida Section ACS

September 2019



SECTION MEETING

3:00 PM, Wednesday, September 25
Twohig Hall Room 107
Barry University, Miami Shores

Dr. Qiaoli Yang

Dark Matter Axions

Abstract: Ordinary matter is made of atoms. However astrophysical and cosmological observations find that approximately 85% of matter in our universe **cannot** be made of atoms. This 85% of matter is invisible to telescopes and reveals itself only through gravity. Thus, it is called dark matter. Experts believe that dark matter is composed of as-yet undiscovered subatomic particles such as axions. Axions are generally predicted by theories with extra dimensions such as string theory. A deep understanding of their quantum properties and consequent cosmological, astrophysical and laboratory properties may serve as a new window on ultra-high energy scale physics.

Qiaoli Yang graduated from the University of Florida with a PhD in theoretical physics in 2012. He is currently an associate professor of physics in Jinan University, Guangzhou, China. He has published many papers in prestigious journals, such as Physical Review Letters, and received the Fundamental Physics Innovation awards from the Gordon and Betty Moore foundation in 2019.

SoFL-ACS is Sponsoring the 2019 NCW Illustrated Poem Contest for K-12 Grade Students

Write and illustrate a poem using the National Chemistry Week theme, "Marvelous Metals." Your poem must be **no more** than 40 words in one of the following styles to be considered: HAIKU – LIMERICK – ABC POEM – ODE – FREE VERSE – END RHYME – BLANK VERSE. Each school can submit ONE entry in K-2, 3-5, 6-8, and 9-12 grade levels. Contest deadline: Wednesday, October 17; mail original artwork to: Dr. Milagros Delgado, FIU-Biscayne Bay Campus AC1-238A, 3000 NW 151st St, North Miami, FL 33181. For questions, email delgadom@fiu.edu

Entries will be judged based upon:

- Artistic Merit – use of color, quality of drawing, design and layout
- Poem Message – fun, motivational, inspiring about yearly theme
- Originality and Creativity – unique, clever, and/or creative design
- Neatness – free of spelling and grammatical errors

Winners of the SoFL-ACS section contest will advance to the ACS National contest for a chance to win \$300 (1st place) or \$150 (2nd place) in each grade level category. For further details and contest rules see: www.softlacs.org

National Chemistry Week Outreach Events

Noon – 4:00 PM, Saturday, October 19
Museum of Discovery and Science
401 SW 2nd Street, Fort Lauderdale



11:00 AM – 3:00 PM, Sunday Oct. 27
Frost Science Museum
1101 Biscayne Blvd., Miami

Chem Club students and faculty from universities and high schools will present chem demos and hands-on activities

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