

# JPL Scientist teaches High School Physics Class

Students at the Academy for Academic Excellence in Apple Valley, CA  
get a first-hand glimpse of the Juno Project from JPL scientist Steve Levin

High School students in John Nyhoff's physics class at the Academy for Academic Excellence (AAE) had a unique experience when Dr. Steve Levin, one of GAVRT's research scientists and the principal Investigator for the JUNO Mission, taught their class on Tuesday, August 15<sup>th</sup>.

The philosophy of the Lewis Center for Educational Research, where the AAE is located, is to allow students to participate in "real science", enabling them to see the relevance of what they are learning. Dr. Levin used PowerPoint slides and computer simulations to demonstrate how the 32 orbits around Jupiter during the JUNO Mission will be laying a net around the planet, gathering data with each pass.

During his presentation, Dr. Levin posed the question, "Why bother?" to the students. His answer? "The history of our solar system is found in the formation of the planet Jupiter." He then went on to challenge the students to think about how old and where they will be when the JUNO Mission is launched in 2011, and when it arrives at Jupiter in 2016. He asked, "Would you want to be part of this mission? There will be jobs for each step of the way."



Dr. Steve Levin, GAVRT Research Scientist and principal investigator for the JUNO Mission



Students in John Nyhoff's physics class listen intently as Dr. Steve Levin explains the purpose of the upcoming JUNO Mission.

GAVRT students will play an integral part in the JUNO Mission by gathering data with GAVRT's radio telescope, DSS-12. In addition, students will be the first to capture images using JUNO Cam as the spacecraft flies over Jupiter's North Pole. As a result of GAVRT's involvement in the Education and Public Outreach for the JUNO mission, the Lewis Center will receive \$265,000 to use in the development of science curriculum and conduct teacher trainings.

High school senior, Micah Nyhoff, said that having a JPL scientist teach physics "...was great because he's from JPL and knows everything! Any questions you have, he answers." Micah went on to say that instead of dealing with books... "this was actual stuff that can help someone, not just busy work."

Dr. Levin's visit was a great way of connecting students with a real scientist. Somehow learning Kepler's 3 Laws from an astrophysicist and demonstrating their connection to the JUNO Mission has more staying power than reading about it in a textbook.