

## Hilton Head Island High students are victors at MIT international robotics competition!

BEAUFORT – Four Hilton Head Island High School robotics students, allied with students from two Italian high schools, battled other teams from around the world today and emerged victorious at the finals of the 2018 Zero Robotics International Space Station competition in Boston.

“I’m so proud of them, it’s unreal,” said teacher John Quindlen, who coaches Hilton Head’s robotics team. “They’re very low-key kids. They don’t blow their own horns; they just do the work. And it’s a pleasure to work with them.”

Students in this year’s competition at the Massachusetts Institute of Technology wrote computer programs that directed an autonomous drilling satellite to efficiently collect ice samples on one of Saturn’s moons in the search for extraterrestrial life. During today’s finals, astronauts in low earth orbit aboard the International Space Station tested the students’ computer programs in microgravity, with results broadcast live via webcast.

Zero Robotics is a joint NASA/MIT initiative that featured more than 230 teams from around the world, primarily from elite schools specializing in science and technology. The best 83 “alliances” competed in today’s finals.

Hilton Head Island’s robotics team, nicknamed “Beach Botics,” entered the finals as the No. 1-ranked team in the world. Its members were senior Bryan Velazquez and sophomores Arnaut Aguilar, Cristian Ambrocio and Kieran Ashton.

By virtue of their No. 1 world ranking, the Hilton Head students got to choose two other teams of students for their alliance. They elected to choose their teammates from two prestigious Italian schools, the Istituto Tecnico Industriale Statale G.B. Pininfarina in Moncalieri, and the Istituto Tecnico Industriale Statale G. Galilie in Livorno.

Quindlen said his Hilton Head students used social media and the Internet to work with their Italian teammates during afternoon and evening hours to perfect their computer coding for the competition. The coach also credited team mentor John Nelanson for his assistance.

Among other things, the students tuned PID controllers for maximum performance, studied and benchmarked the performance of other competitors, “squeezed” computer coding to fit limited processor space, and simulated and logged performance of code changes.

“These amazing students have set a standard for excellence that is literally out of this world,” said Superintendent Jeff Moss. “They’ve not only made their school proud, they’ve made the entire school district proud.”

Other student teams in this year’s Zero Robotics ISS Competition came from Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland and the United Kingdom.

EDITOR’S NOTES: To watch today’s webcast of astronauts aboard the ISS conducting the final match, visit this link (<http://web.mit.edu/webcast/spheres>) at the 5:37:00 time stamp. The Hilton Head alliance is nicknamed BeachPin1701. To see interviews of the students prior to their departure for MIT, visit <https://www.youtube.com/watch?v=WOuKQvvICmA>