



***St. Louis Area Physics Teachers
32nd Annual High School Physics Contest
2017 Contest Results***

On Saturday, April 22, 2017, the St. Louis Section of the American Association of Physics Teachers and Washington University hosted the 32nd edition of the St. Louis Area Physics Teachers High School Physics Contest. The contest was held in historic Crow Hall at Washington University in St. Louis.

148 students from 12 schools participated in this year's contest. The test period was 2 hours for both the Mechanics Division, a 50-question test dealing with only mechanics topics, and the Comprehensive Division, a 50-question test that included questions from mechanics, fluids, thermodynamics, electricity and magnetism, optics and modern physics. Awards were given in each division for first through third place for individuals, as well as honorable mention awards for the next highest 20% of the scores. Team awards were given in both divisions to the top three scoring teams, based on the sum of the four highest scores from each school for schools with more than 500 students. For schools with less than 500 students, team awards were also given to the top three scoring teams in both divisions based on the sum of the three highest scores from each school.

There were 97 participants in the Mechanics Division in each of two levels.
This year's individual awardees for large schools are:

- 1st Place, \$100 – Ben Gossow – Webster Groves High School
- 2nd Place, \$50 – Saayli Khambekar – Parkway North High School
- 3rd Place, \$25 – Mike McPherson – Webster Groves High School

Honorable Mention Awards were given to the next highest scoring 20% of the participants. Recipients include Richard Cheng, Kellan Duan, Zach Hadjri, Peter Humphreys, Kevin Kotzbauer, Myles McCarthy, Emilio Rosas and Junyi Su of Clayton High School, Josh Hedeman, Michael Lippencott, and Gavin Lewis of Francis Howell Central High School, Jacob Mack of Parkway Central High School, Nathan Dyer, Steven Fatzinger, Samuel He, and Matt Kellerman of Parkway North High School, Stephanie Teng and Cody Um of Thomas Jefferson High School, and Anthony Brown, Keillyn Johnson, Ben Linehan, and Ethan Whitaker of Webster Groves High School.

The mechanics division exam ended up with only 48 questions being scored as questions 7 and 15 did not contain a correct answer among the choices.

Team awards for the Mechanics Division, Large School are:

- 1st Place – Webster Groves High School
- 2nd Place – Clayton High School
- 3rd Place – Parkway North High School

Team awards for the Mechanics Division, Small School are:

- 1st Place – Thomas Jefferson High School
- 2nd Place – Marquette Catholic High School

There were 51 participants in the Comprehensive Division.

This year's individual awardees for large schools are:

- 1st Place, \$100 – Kevin Jiang – Ladue Horton Watkins High School
- 2nd Place, \$50 – Donovan Smith – Webster Groves High School
- 3rd Place, \$25 – Harry Rubin – Clayton High School

Honorable Mention awards were given to Matt Schulz of Christian Brothers College High School, Cooper Kennelly, Claire Millett, and Emily Sharp of Clayton High School, Amy An, Tony Chen, Claire Huang, James Kim, and Alex Luckerman of Parkway Central High School, and Will Kimball, Prem Rao, and Dorothea Starr-Lebeau of Webster Groves High School.

Team awards for the Senior Division, Large School are:

- 1st Place – Clayton High School
- 2nd Place – Webster Groves High School
- 3rd Place – Parkway Central High School

Team awards for the Senior Division, Small School are:

- 1st Place – Marquette Catholic High School
- 2nd Place – Thomas Jefferson High School
- 3rd Place – Trinity Catholic High School

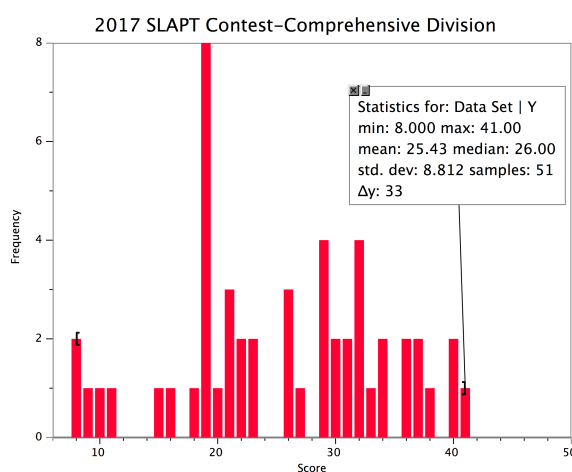
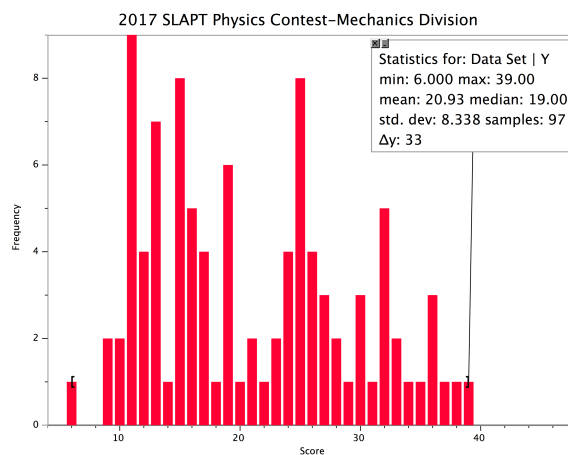
2017 SLAPT Physics Contest Statistics

Mechanics Division

Number of Participants: 97
Mean: 20.9
Median: 19.0
Standard Deviation: 8.34
Lowest Score: 6
Highest Score: 39
Highest Possible Score: 48
Cutoff Score for Hon. Mention: 27

Senior Division

Number of Participants: 51
Mean: 25.4
Median: 26.0
Standard Deviation: 8.81
Lowest Score: 8
Highest Score: 41
Highest Possible Score: 50
Cutoff Score for Hon. Mention: 32



The St. Louis Area Physics Teachers Association wishes to congratulate all students who participated and to thank all of the physics teachers who brought students to the contest this year. Special thanks go to Washington University, and particularly to Jared Lalmansingh and his fellow Washington University graduate students for coordinating the production of the test. We'd also like to thank Professor James Buckley of Washington University for hosting the contest and for arranging for pizza for all participants, as well as Professor Kater Murch for engaging participants with a brief explanation of the work of his research group at Washington University. We'd like to thank Mike Johns, for his diligent work to send announcement and reminder emails and to advertise the contest on the SLAPT website; Gabe de la Paz for designing the scoring spreadsheet that allowed us to quickly and efficiently analyze the scores; Jim Cibulka, Elegan Kramer, Jen Meyer, and Jenna Piazza who helped diagnose test errors and assisted in proctoring the contest and producing the awards; and Frank Cange, whose passion for the continuation and growth of the contest has allowed it to continue for 32 years. Without David Schuster, who has coordinated this event for the past several years, the 2017 physics competition would not have been possible.

On a personal note, I'd like to thank the dozens of individuals who have worked so hard for the past 32 years to provide this opportunity for St. Louis area physics students. Clayton High School has been involved in the contest since its inception, and my students have participated for 27 of those years. I know that they have valued the experience. As I retire from classroom teaching at the end of this school year, I hope to be able to continue to be involved in some capacity to promote and produce this worthwhile event. Thanks for 27 great years.

The 32nd Annual SLAPT High School Physics was, by all indications, a tremendous success, We hope to involve even more schools and students when the SLAPT High School Physics Contest celebrates its 33rd anniversary in 2018.

Rex Rice
St. Louis Area Physics Teachers Section
American Association of Physics Teachers