2019 CAP High School Prize Examination

Announcing the upcoming annual Canadian Association of Physicists (CAP) High School Prize Examination for senior high school physics students. The exam is to be held on the morning of **Tuesday April 9, 2019**.

The CAP is an association of physicists from universities, government laboratories and industry. One of its aims is "to promote knowledge in the physical sciences and the dissemination of information relating thereto in and between all sections and regions of Canada." This Prize Exam is organized to help in this aim.

The prize examination is created by a national committee. Students from across the country will write the same examination. The CAP High School Exam is based upon an internationally recognized syllabus, the I.B. Physics Higher Core Curriculum. Only sections of the syllabus covering mechanics, Optics and Electricity and Magnetism are examined by the CAP Exam. Since all provinces in Canada have different curricula and the level of physics taught varies widely, the exam uses a broad based core curriculum which is widely recognized and used throughout the world. Copies of old exam papers are also available on our Department of Physics and Engineering Physics web site (http://physics.usask.ca/~pywell/HighSchool). More information is available on the CAP web site at https://www.cap.ca/programs/medals-and-awards/prizes-students/cegep-prize-exam/cap-high-school-cegep-prize-exam/. There is also a link there to copies of old exams. It should be noted that *this examination is intentionally set at a high standard*. It is intended for only the very best students in each school. There are other physics competitions that may be more suitable for the general population of physics students, one of which may be the University of Saskatchewan High School Physics Competition (information attached).

The results of the Exam will be used by the National Physics Olympiad organization in their search for potential members of the Canadian team, which will go to the 50th International Physics Olympiad, to be held in Tel Aviv, Israel from $7^{th} - 15^{th}$ July, 2019. The top three students overall will receive automatic invitations to attend the 2019 National Physics Olympiad Finals.

The Exam paper will be three hours long and will contain 25 multiple choice questions and three long answer questions. All papers will be looked at provincially and the ten best papers, including all those with scores on the multiple choice section above a set cut-off, will be sent to the CAP for final grading by a national committee. As well as the Provincial Prizes for first, second and third, there will be National Prizes of \$500 for first, \$300 for second and \$200 for third. Winners will be notified in May.

We are requesting that each school make its own arrangements regarding the place for writing the exam. Any number of students may sit the exam, but we recommend that teacher discretion be used, as the exam is meant to stretch even the most capable students. Please return the examination request form, by mail or fax, to request an appropriate number of examination papers (*examination request forms attached*). You may also send your requests with the necessary information by e-mail (address below). We do not need to know the names of the students at this time. Papers will be available in French or English. <u>Requests should be received by March 25, 2019</u>. Exam materials will be mailed to reach you at least one week before the exam date.

If you would like more information please phone the University of Saskatchewan, Department of Physics and Engineering Physics at (306) 966-6396, fax (306) 966-6400, or by e-mail to the departmental secretary at marj.granrude@usask.ca.

Yours Sincerely,

Dr. Mark Boland & Dr. Yansun Yao, Provincial Coordinators for the CAP High School Prize Examination