

**The 2015 University Physics Competition
Results Announcement – January 15, 2016**

We are very pleased to announce the results of the sixth annual University Physics Competition. The University Physics Competition is an international contest for undergraduate students, who worked in teams of up to three students at their home colleges and universities all over the world, and spent 48 hours during the weekend of November 13, 14, & 15, 2015, analyzing an applied scenario using the principles of physics, and writing a formal paper describing their work.

In this year's competition 150 teams submitted papers for judging. 77 teams selected "Problem A – Terraforming Mars" and 73 teams selected "Problem B – Golfing Around a Tree."

For Problem A, the Gold Medal Winning Team was:

Team 190: Victor Chan, Michael Primrose, & Vismay Shah
Institution: University of Toronto
Faculty Sponsor: Dae-Sik Moon

For problem B, the Gold Medal Winning Team was:

Team 108: Haoran Miao, Shutong Li, & Yihong Zhang
Institution: Nanjing University
Faculty Sponsor: Sihui Wang

Of the 150 papers submitted in the 2015 University Physics Competition, 2 teams (1.3%) were ranked as Gold Medal Winners, 25 teams (17%) were ranked as Silver Medal Winners, 43 teams (29%) were ranked as Bronze Medal Winners, and 80 teams (53%) were ranked as Accomplished Competitors.

We extend our sincerest congratulations to each of the 150 competing teams for their excellent work and their enthusiasm for physics!

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Problem A - Terraforming Mars

Team #	Sponsor/Students	Institution	Problem	Rank
190	Dae-Sik Moon Victor Chan, Michael Primrose, & Vismay Shah	University of Toronto	A	Gold Medal
107	Lutz Feld Frederik Wangelik, David Schmidt, Hauke Biss	RWTH Aachen	A	Silver Medal
125	Hyoungsoon Choi Erwin H. Tanin, Duong Q. Dinh, Daulet Kurmantayev	KAIST	A	Silver Medal
136	Yuri Gartstein Joe Burnett, Christopher Cormier, Artem Bolshakov	University of Texas at Dallas	A	Silver Medal
147	Raditya Weda Bomantara Li Weijun, Guo Bing Sheng, Cui Xinhang	National University of Singapore	A	Silver Medal
150	Gang Peng Yu Lu, Yunpeng Yao, Qirui Yang	National University of Defense Technology	A	Silver Medal
186	Reinard Primulando Meutia Wulansatiti Nursanto, Devi Handevi, Elwin	Parahyangan Catholic University, Indonesia	A	Silver Medal
199	Ed Greco Devon Ingram, Alex Buser, Thomas Koelle	Georgia Institute of Technology	A	Silver Medal
216	Mounib Eid Petra Awad, Sevana Sarraf, Samer Abuthaher	American University of Beirut	A	Silver Medal
224	Gang Peng Deyao Yu, Kongjing Gu, Qian Zhang	National University of Defense Technology	A	Silver Medal
244	Robert Leheny Chenxiao Zeng, Duan Li, Yi Lee	Johns Hopkins University	A	Silver Medal
245	Lindsay King Daniel Eilbott, Alexander Zahabizadeh, Corinne Blangy	The University of Texas at Dallas	A	Silver Medal
263	Jun Yang Diqing Chen, Cequn Li, Candi Zheng	South University of Science and Technology of China	A	Silver Medal
265	Sabine Stanley Chris (Yuan Qi) Ni, Hiromitsu Sawaoka, Yuan Yao	University of Toronto	A	Silver Medal
101	Zhang Ya Mei Su Hang, Xu Yang, Chen Tian Yi	Jiangsu University of Science and Technology	A	Bronze Medal
130	Mateusz Krzyzosiak Feng Shihao, Jiang Yifan, Gao Mingjie	Shanghai Jiao Tong University	A	Bronze Medal
131	Andrew Frey Josh Titus, Raphael Hault	University of Winnipeg	A	Bronze Medal
152	Gang Peng Xiaotan Zhang, Xingyu Zhao, Weijie Zheng	National University of Defense Technology	A	Bronze Medal
153	Gang Peng Runhao Li, Zhen Li, Shuailin Liu	National University of Defense Technology	A	Bronze Medal
162	Gang Peng GuangXin Li, Dun Niu, SiYu Ye	National University of Defense Technology	A	Bronze Medal
164	Gang Peng Qi Chang, Xin Zhou, Huankai Zhang	National University of Defense Technology	A	Bronze Medal
165	Gang Peng Haohao Li, Yu Pei, Xiaoxi Lu	National University of Defense Technology	A	Bronze Medal
173	Mateusz Krzyzosiak Li Zihan, Li Xiahuan, Gu Yide	UM-SJTU Joint Institute	A	Bronze Medal
179	Apostolatos Theocharis Polykratis George, Vourliotis Emmanouil, Gounaris Georgios	University of Athens	A	Bronze Medal
189	Jun Yang Mingqi Yan, Kaige Shi, Kebin Sun	South University of Science and Technology of China	A	Bronze Medal
194	Francesc Ferrer Anthony Grebe, Fangzhou Xiao, Chris Munley	Washington University in St Louis	A	Bronze Medal

198	Stephen W. Morris Yifu Li, Yilun Huang, Ruoshu Zheng	University of Toronto	A	Bronze Medal
200	Sabine Stanley Andrey Khesin, Dmitry Paramonov	University of Toronto	A	Bronze Medal
209	Rafel Escribano Ángel Joaniquet Tukiainen, Pau Torres Bravo, Álex Molas Martin	Universitat Autònoma de Barcelona	A	Bronze Medal
212	Marta González Silveira Jaume de Dios Pont, Irina Espejo Morales, Marc Rodà Llordés	Universitat Autònoma de Barcelona	A	Bronze Medal
218	James Alsup Paul Manion, Matthew Sutter, Justin Wisby	University of Michigan-Flint	A	Bronze Medal
227	Ehsan Khatami Eric Freda, John Kam, Ryan Sudhakaran	San Jose State University	A	Bronze Medal
238	Sabine Stanley Tailong He, Ryan Li, Ke Jun Xu	University of Toronto	A	Bronze Medal
264	Daisuke Nagai Jacob Marks, Alexander Lee, Matthew Brady	Yale University	A	Bronze Medal
106	Sihui Wang Wending Zhao, Zhiyi Yuan, Zhouyou Fan	Nanjing University China	A	Acc. Competitor
112	Sabine Stanley Dong Hao Ou Yang, Zhihong Wang, Aofei Liu	University of Toronto St. George	A	Acc. Competitor
118	Raditya Weda Bomantara Zheng Liang, Yeo Xie Jie, Chee Chau	National University of Singapore	A	Acc. Competitor
122	Youjin Deng Wance Wang, Zeguan Wang, Ying Luo	University of Science and Technology of China	A	Acc. Competitor
123	M. Elena Tejeda-Yeomans Luz Zamora, Ines Valenzuela, Gabriela Carretas	Universidad de Sonora	A	Acc. Competitor
124	M. Elena Tejeda-Yeomans Cristian Baldenegro, Saulo Hernandez, Julio Maldonado	Universidad de Sonora	A	Acc. Competitor
127	Andrew Frey Jyota Malcolm, Jossa Soto, Cayan Caglar	University of Winnipeg	A	Acc. Competitor
129	Andrew Frey Veronica Fieldhouse, Sarah Campbell, Steven Casson	University of Winnipeg	A	Acc. Competitor
133	C. P. Price Caleb Gordon, Chris Eckerson, Erik Grazulis	Univ. Alaska Fairbanks	A	Acc. Competitor
134	C. P. Price Riley Troyer, Khan Overcast, Harry Hartle	Univ. Alaska Fairbanks	A	Acc. Competitor
137	Andrew Meyertholen Jingning Zhou, Yinan Liu, Ziqi Li	University of Toronto	A	Acc. Competitor
140	Shengjun Wu Haining Pan, Xuhui Jiang, Laisi Chen	Nanjing University	A	Acc. Competitor
141	Mehmet Özgür Oktel Doruk Efe Gökmen, Nurlan Avazlı, Ata Özdemir	Bilkent University	A	Acc. Competitor
143	Sabine Stanley Nadiya Bayeva, Ziyi Zhang, Tong Le Feng	University of Toronto	A	Acc. Competitor
148	Sachin Kumar Sanjeev Kumar, Mayank Sharma, Arpan Ghosal	Motilal Nehru College, University of Delhi	A	Acc. Competitor
151	Gang Peng Jiaxin Li, Xugang Wu, Tianyue Hou	National University of Defense Technology	A	Acc. Competitor
168	John F. Lindner Nathaniel Moore, Emma Brinton, Hwan Bae	The College of Wooster	A	Acc. Competitor
170	Sabine Stanley Fangwei Chang, Abhishek Siwakoti, Dong Chen	University of Toronto	A	Acc. Competitor
171	Tycho Sleator Felix Feist, Randall Kayser, Sreela Das	New York University	A	Acc. Competitor

172	Anock Somadder S. M. Rafee Adnan, Ahmed Estiak, Shakir Ahmed	Shahjalal University of Science and Technology	A	Acc. Competitor
175	Rafael Escribano Sergi Burniol Clotet, Marco Praderio, Jordi Zanca Soler	Universitat Autònoma de Barcelona	A	Acc. Competitor
176	Robert Leheny Alec Farid, Denis McInerney, Daphne Schlesinger	Johns Hopkins University	A	Acc. Competitor
177	Nirav Mehta Liam Fox, Cameron Martin, Jacob Abajian	Trinity University	A	Acc. Competitor
178	Nirav Mehta Kirsten Endresen, Jingqing Yang, William Farner	Trinity University	A	Acc. Competitor
191	Francesc Ferrer Fan Chen, Pengning Chao, Zhengdao Chen	Washington University in St Louis	A	Acc. Competitor
192	Francesc Ferrer Bohan Lu, Jordan Pack, Ryan Wahidi	Washington University in St Louis	A	Acc. Competitor
197	Joseph Ribaudo Brittany Vanderhoof, Hope Murphy	Utica College	A	Acc. Competitor
203	Randolph Peterson Daniel Rosales Giron, Xin Chen, Muhammad Siddiqi	University of the South	A	Acc. Competitor
214	Fang Kai Ding Shanshan, Dai Haoting, Liu Lin	Tongji University	A	Acc. Competitor
225	Alfredo Aranda Daniel Castellanos-Magaña, Luis Ángel Delgadillo-Franco, Martín Alberto Jacobo-Pamplona	Universidad de Colima	A	Acc. Competitor
230	Changcheng Zheng Yueqing Sun, Zhenhua Wu, Lanting Ding	Xi'an Jiaotong-Liverpool University	A	Acc. Competitor
232	Amena Khan Kylie Tacker, Brian Barajas, Nathan Hayes	University of Texas at Dallas	A	Acc. Competitor
237	Sylvio May Matt Urich, Parker Pavlicek, Eric Kubischta	North Dakota State University	A	Acc. Competitor
241	Laszlo Takacs Adam Goad, Greg Huxtable, Sigfredo Soto	University of Maryland, Baltimore County	A	Acc. Competitor
243	Justin Khoury Parker Henry, Mohammad Al-Hejji, Bryan Fichera	University of Pennsylvania	A	Acc. Competitor
249	MK Raghavendra Sarat Chandra Kant T, Rohit Dokara, Deepali	Indian Institute of Science	A	Acc. Competitor
250	Hao Yu Yan Li, Xiangjun Wang, Wangkun Xu	Xi'an Jiaotong-Liverpool University	A	Acc. Competitor
255	Sabine Stanley Valerie Luo, Daniel Goldberg, Derek Lam	University of Toronto	A	Acc. Competitor
256	David Olsgaard Kellan Kremer, Erin Boggess, Nick Joslyn	Simpson College	A	Acc. Competitor
258	David Olsgaard Ian Appelgate, Walker Mask	Simpson College	A	Acc. Competitor
259	David Olsgaard Taylor Jurgensen, Zach Gaddy	Simpson College	A	Acc. Competitor
261	Angalabiriwei-Okubo Zion Pibowei, Clinton Azubuike, Elisha Okoye	Renaissance University, Enugu, Nigeria	A	Acc. Competitor
262	Robert K. Logan Dawood Cheema	University of Toronto	A	Acc. Competitor

Problem B - Golfing Around a Tree

Team #	Sponsor/Students	Institution	Problem	Rank
108	Sihui Wang Haoran Miao, Shutong Li, & Yihong Zhang	Nanjing University	B	Gold Medal
105	Roxanne P. Springer Hao Geng, Zhetao Jia, Fan Zhang	Duke University	B	Silver Medal
145	Xiaoyong Wang Liyang Chen, Gengxi Lu, Jianan Song	Nanjing University	B	Silver Medal
146	Sabine Stanley Hayden Johnson, Stefan Divic, Polina Zavyalova	University of Toronto	B	Silver Medal
180	Peter Schupp Gautam Rai, Max Schallwig, Sven Wasmus	Jacobs University Bremen	B	Silver Medal
181	Sònia Fernández-Vidal Ignasi Gros Lluch, Anicet Tibau Vidal, Bernat Molero	Universitat Autònoma de Barcelona	B	Silver Medal
182	Kenneth Hong Chong Min Li Yunzhe, Marken Foo Yong Wen, Li Zejian	National University of Singapore	B	Silver Medal
184	John Coroneus Huy Ho, Kenta Morimoto, Keith Inouye	El Camino College	B	Silver Medal
195	Justin Khoury William Saunders, Simran Arora, Xiping Yang	University of Pennsylvania	B	Silver Medal
207	Verònica Ahufinger Breto Daniel Salgado Rojo, Alejandro Molero Casanova, Sergio Hilario Martínez Mateu	Universitat Autònoma de Barcelona	B	Silver Medal
211	Verónica Ahufinger Breto Jan Ollé Aguilera, Axel Masó Puigdellosas, Andreu Riera Campeny	Universitat Autònoma de Barcelona	B	Silver Medal
219	Md. Enamul Hoque Mabrur Ahmed, Md. Sakibul Islam, Md. Shafayet Islam	Shahjalal University of Science and Technology	B	Silver Medal
233	Jinjun Liang Bowen Zhang, Kai Bao, Jin Xi	Xi'an Jiaotong-Liverpool University	B	Silver Medal
111	Sabine Stanley Wilson Wu, Bill Kong, Siddharth Mahendrakar	University of Toronto	B	Bronze Medal
117	Michael Waite Shouzhen Gu, Wenchao Jiang, Michael Zhu	University of Waterloo	B	Bronze Medal
126	Sihui Wang Hangting Chen, Weizhu Yi, Wanchen Li	Nanjing University	B	Bronze Medal
135	C. P. Price Parker Whaley, Colin Latimer, Amir Raz	Univ. Alaska Fairbanks	B	Bronze Medal
142	Weida Wu Zheng Ju, Victor Krapivin, Xiaofei Yu	Rutgers University-New Brunswick	B	Bronze Medal
156	Gang Peng Enrui Zhang, Yiyu Wang, Jianxun Wang	National University of Defense Technology	B	Bronze Medal
159	Gang Peng Nanxin Li, Yuan Shui, En Liu	National University of Defense Technology	B	Bronze Medal
163	Gang Peng Jinsen Han, Qingxia Meng, Wu Lian	National University of Defense Technology	B	Bronze Medal
166	Seymur Cahangirov Ahmmet Burak Çatlı, Doğa Gürgünoğlu, Siddik Süleyman Kahraman	Bilkent University	B	Bronze Medal
174	Paul Rakow Yang Fei, Bingnan Luo, Qing Lan	University of Liverpool	B	Bronze Medal
183	Koen Van Den Abeele Marlies Vantomme, Wouter Deleersnyder, Jens Spenninck	KU Leuven KULAK	B	Bronze Medal
185	Reinard Primulando Muhammad Arifin Dobson, Arvin Cansius	Parahyangan Catholic University, Indonesia	B	Bronze Medal
201	Abhinav Gupta Aditya Guha, Abhinav Joshi, Tuneer Chakraborty	St. Stephen's College, Delhi University	B	Bronze Medal

206	Ed Greco Mary Elizabeth Lee, Silas Fradley, Jared Van Den Heuval	Georgia Institute of Technology	B	Bronze Medal
208	Jordi Mompert Martín Campos Heredia, David Masip Bonet, Breixo Álvarez Domínguez	Universitat Autònoma de Barcelona	B	Bronze Medal
221	Gang Peng Longkun Du, Zhitao Chen, Rui Zhang	National University of Defense Technology	B	Bronze Medal
222	Gang Peng Ruijun Hu, Hanyang Zhong, Taiyu Wang	National University of Defense Technology	B	Bronze Medal
223	Gang Peng Kang Tang, Yu Peng, Juao He	National University of Defense Technology	B	Bronze Medal
228	Changcheng Zheng Chenxia Gu, Jiehao Zhang, Xianbin Hong	Xi'an Jiaotong-Liverpool University	B	Bronze Medal
239	Sylvio May Mitchell Zubich, Joseph Roth, Lane Morrison	North Dakota State University	B	Bronze Medal
240	Laszlo Takacs Ben Gillingham, Sarah Knop, Kyle Belluomo	University of Maryland, Baltimore County	B	Bronze Medal
246	Douglas Singleton Andres Zumba Quezada, Shoji Hishida, AJ Bassill	California State University Fresno	B	Bronze Medal
254	Stacie Nunes Chevonne McInnis, Ryan Kropas	SUNY New Paltz	B	Bronze Medal
103	Rishi Sharma Sanidhya Sinha, Anant Agnihotri, Soumya Dubey	Birla Institute of Technology	B	Acc. Competitor
114	Ruiyun Chen Qianhang Ding, Yu Zhang, Lin Li	Shanxi University	B	Acc. Competitor
115	Jakub Zakrzewski Piotr Staron, Dawid Brzeminski, Pawel Zalecki	Jagiellonian University	B	Acc. Competitor
119	Mangala Gurjar Shivam Agrawal, Shikhar Goenka, Taher Ali Habib	St.Xavier's College, Mumbai	B	Acc. Competitor
120	Peter Schupp Anik Halder, Cristiana Ioana Bercea, Valentin Munteanu	Jacobs University Bremen	B	Acc. Competitor
121	Jun Yang Rongyu Lin, Weihua Lei, Tong Liang	South University of Science and Technology of China	B	Acc. Competitor
128	Andrew Frey Sashika Kumaragamage, Michael Honke, Tasha Jones	University of Winnipeg	B	Acc. Competitor
132	Kai Guo Shouheng Li, Dexuan Yang, Jixu Feng	National University of Defense Technology	B	Acc. Competitor
138	Jonathan Taylor Papazachariou Theodoros Stylianos, Quinn Palmer, Kristian Anastasiou	Glasgow University, UK	B	Acc. Competitor
139	Sueli Mieko Tanaka Aki Raquel Gama Lima Costa, Marcos Silva de Luca, Guilherme de Sousa	Universidade de Sao Paulo USP	B	Acc. Competitor
144	Orazov Gylychmammety Malikov Meylis, Toyjanov Mekan, Amanmadov Allamyrat	Magtymguly Turkmen State University	B	Acc. Competitor
149	Ji Chen Rui He, Jian Zhang, Nan Zheng	South University of Science and Technology of China	B	Acc. Competitor
154	Gang Peng Binglin Wang, Mingyuan Zhao, Hengyu Zhang	National University of Defense Technology	B	Acc. Competitor
155	Gang Peng Pengde Ma, Jiawei Yao, Heng Xu	National University of Defense Technology	B	Acc. Competitor
157	Gang Peng Xianchen Zhou, Guochun Chen, Hao Zhang	National University of Defense Technology	B	Acc. Competitor
158	Gang Peng Ye Cui, Yuling Yang, Junhao Gu	National University of Defense Technology	B	Acc. Competitor
160	Gang Peng Di Sang, Yao Li, Ang Zhou	National University of Defense Technology	B	Acc. Competitor

161	Gang Peng Luyi Yang, Yizhi Wang, Shuchang Liu	National University of Defense Technology	B	Acc. Competitor
167	Vasco Guerra João Fragoso Melo, Tiago Elias de Sousa França, Pedro António Correia Ninhos	Instituto Superior Técnico, Universidade de Lisboa	B	Acc. Competitor
169	John F. Lindner Robin Morillo, Alishan Premani, Jacob Denbeaux	The College of Wooster	B	Acc. Competitor
188	Weidong Zhu Joseph Ghobrial, Nnamdi Ike, Bryan Huaman	Saint Peter's University	B	Acc. Competitor
196	Joseph Ribaudó Jonathan Hoover, Daniel Alfeo	Utica College	B	Acc. Competitor
202	Yan Wang Yi-Qian Qian, Guo-Liang Guo, Bing-Zhong Hu	Huazhong University of Science and Technology	B	Acc. Competitor
204	Randolph Peterson Tyler Blankenship, Will Burton-Edwards, Davis Easley	University of the South	B	Acc. Competitor
205	Ed Greco Sujeeth Jinesh, Talha Irfan Khawaja, Kenneth Higginbotham	Georgia Institute of Technology	B	Acc. Competitor
213	Fang Kai Xu Junwen, Huang Yicheng, Shi Yanli	Tongji University	B	Acc. Competitor
215	James Alsup Bayarjavkhlan Batbaatar, Ashley O'Brien, Kenneth O'Brien	University of Michigan-Flint	B	Acc. Competitor
220	Gang Peng Xing Chen, Yun Cheng, Jian Zhou	National University of Defense Technology	B	Acc. Competitor
229	Andrew Meyertholen Jahnvi Shah, Subin Kim	University of Toronto	B	Acc. Competitor
234	Hao Yu Menglong He, Lu Wang, Lanxiang Wang	Xi'an Jiaotong-Liverpool University	B	Acc. Competitor
235	Sylvio May Scott Jezusko, Jacob Schulze, Clay Carufel	North Dakota State University	B	Acc. Competitor
242	Laszlo Takacs John Hannegan, Michael Wolfe, James Loy	University of Maryland, Baltimore County	B	Acc. Competitor
251	Philip Spickler Matthew Wampler, Dallas McKinney, Sean Fishgold	Bridgewater College	B	Acc. Competitor
252	Philip Spickler Jeremy Gingrich, Alexis Czarnatowicz, Dale Ervin	Bridgewater College	B	Acc. Competitor
253	Zhang Ya Peng Lo Chim Yui, Tang Justin Wang-Lap, Wong Kwan Yue Clinton	The Chinese University of Hong Kong	B	Acc. Competitor
257	David Olsgaard J. J. Hansen, Zack Lindeberg, Kristina Smith	Simpson College	B	Acc. Competitor
260	Sabine Stanley Shubham Sharma, Garisian Kana, Dylan Langburt	University of Toronto	B	Acc. Competitor