

About OCO ...

The Olin Conductorless Orchestra (OCO)—an ensemble, minus conductor—features instrumentalists in leadership, communicative, and collaborative roles. Dedicated to orchestral performance in the concerted spirit of chamber music, the orchestra forges individual participation, active listening, and group-motivation into performances that have established it as the only conductorless orchestra composed of engineers—in the world!

Recent performances outside Olin include The Great Hall at Cooper Union in New York City and Powers Hall at the Needham Town Hall, both of which received standing ovations. Since its fall 2002 inception, OCO has been a Project-Based Learning (PBL) course where students operate the classroom, and the professor contributes as guide-on-the-side. In helping to run rehearsals, students develop leadership, teamwork, and communication skills in a large team environment. With an essentially flat hierarchy that incorporates an ever-evolving sense of culture and cooperation as a working ensemble, OCO functions as a team of musicians—regardless of position—comprising students, faculty, and external guests, all dedicated to making good music with intensity, camaraderie, excitement, and humor.



The Olin Conductorless Orchestra

Olin College of Engineering
Needham, MA



ASEE Zone 1 Conference
Niagara Falls, NY
Friday, April 12, 2019

OCO

Serena Chen, Anne Ku, Margaret Rosner, Annie Tor,
Brandon Zhang, Lydia Zuehsow—violins
Rachel Won—cello
Jeremy Ryan, Eric Miller—flutes
Shashank Swaminathan—alto flute
Jack Mao—alto sax
Kyle Emmi—trumpet
Aditya Sudhakar—euphonium
Paul Nadan—trombone
Joseph Lee—timpani
Jonah Spicher—piano

Mix and stir ...

OCO navigators: Kyle Emmi and Margaret Rosner

Sibelius transcribers: Kyle Emmi, Anne Ku, Justin Kunimune, Junwon Lee, and Brandon Zhang

Head transcribers: Anne Ku and Justin Kunimune

Adjudication and professional coaching: Michael Avitabile (Hub New Music), Charles Peltz (New England Conservatory), Sam Solomon (Boston University), Megumi Stohs (A Far Cry), and Diana Dabby (OCO professor)

Re-orchestrations: Diana Dabby

Many thanks to the following people for their help with OCO:

William Baez (Facilities personnel), **Ellen Bailey** (Business Manager, Administrative Services and Innovation), **Holly Bennett** (Senior Admin. Asst. for Academic Affairs), **Alanna Boyd** (Director of Development), **Susan Brisson** (Director of Admission), **Krystal Burgos** (Asst. Dir. for Admission Systems & Operations), **Rae-Anne Butera** (Dean of Students Affairs), **Pedro Cabrera** (Facilities personnel), **Linda Canavan** (Associate Dean for Academic Programs, and Registrar), **Neiza Correia** (Facilities personnel), **Paul Coveney** (Admin. Asst. for Academic Affairs), **Anne-Marie Dorning** (Director of Content Development, Marketing and Communication), **Noel Espinal** (Facilities Asst. Director), **Francisco Fernandez** (Facilities personnel), **Jacqueline Fernandez** (Facilities personnel), **Marcella Fornagiel** (Admin. Asst. for Academic Affairs), **Alia Georges** (Asst. Director of Admission and Financial Aid Counselor), **Jeremy Goodman** (V.P. for Administrative Services and Innovation), **Alyson Goodrow** (Director of Marketing), **Steve Hannabury** (Executive V.P. Emeritus), **Stephanie Hill** (Asst. to Dean of Admission and Financial Aid and Campus Visit Coordinator), **Joe Hunter** (Remember Productions), **Beth Kramer** (V.P. for Advancement), **Barbara Luciano** (Admin. Asst. for Academic Affairs), **Vin Manno** (Provost), **Katherine McDonough** (Asst. to the Provost and Dean of the Faculty), **Robinson Medrano** (Facilities personnel), **Susan Mihailidis** (Director of Academic Affairs and Sponsored Programs), **Rick Miller** (President), **Shannon Paleologos** (Director of Annual Giving and Family and Alumni Relations), **Emily Petersell** (Asst. Director of Admission), **Brian Read** (Major Gifts Officer), **Kathleen Rollauer** (Director of Advancement Services), **Emily Roper-Doten** (Dean of Admission and Financial Aid), **Mark Somerville** (Dean of Faculty), **John Sullivan** (Program Director, Needham Lions Club), **Nancy Sullivan** (Asst. to the President), **Ashlee Talbot** (Program Coordinator, Student Affairs and Resources), **Paul McAuley** (Facilities Director), Music Program Assistants **Joseph Lee '19**, **Brandon Zhang '21**, and **Luis Zuniga '21**.

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Jane F. Tor, Li Fan, Susan Johanson, Brian Tor, Charles Nolan, Christopher Lee, Evan Dorsky, Daniel Rosner, Rongnong Zhou, Carol Reilly, Nancy and John Sullivan, Vincent Manno, Susan Goldstein, Linda Vanasupa, Justin P. Emmi, Janet Tsai, Molly Crowther, Rose E. Higgins, Anne Ku, Colin Takeda, Vaishali Sudhakar, Meg Lidrbauch, Charlotte Lidrbauch, Wen Fan, Gopal Borde, Suzanne Alcott, and Anonymous {3}.



Annie Tor '22 is a violinist from Pleasanton, CA. In her spare time she enjoys building friendships. In addition to OCO, Annie is an active member of Olin Electric Motorsports and a friend to many.



Rachel Won '21 is from Saratoga, CA. Her major is Mechanical Engineering. She has been playing the cello for 9 years and has played in the California Philharmonic Youth Orchestra, Hopebox Charity Orchestra, and J'adore Cello, a 16-cello ensemble.



Brandon Zhang '21 is from Tenafly, NJ, and is majoring in Mechanical Engineering. He picked up violin in 3rd grade. He enjoys math, rocketry, and board games. This is Brandon's second year in OCO, and he has enjoyed every second of it!



Lydia Zuehsow '19 is a violinist from Chicago, IL. She enjoys building intelligent robots in her free time, including but not limited to: a CNC M&M printer, a dinosaur head that moves to stare intently at you, a sassy tour guide bot, a stargazing vacuum, flying ornaments, and smart office supplies. After graduation she'll be working at Amazon Robotics.

OCO gratefully acknowledges Shane Rogers, ASEE Zone 1 Chair and Assoc. Prof. of Civil & Environmental Engineering at Clarkson University, for his help in making this concert a reality. We couldn't have done it without you, Shane!

The Olin Conductorless Orchestra

April 12, 2019

Program

Medley from <i>Pirates of the Caribbean</i>	K. Badelt/T. Ricketts*
Rondo from the <i>Serenade for Winds</i> , K. 361	W.A. Mozart*
Marche Hongroise from <i>La Damnation de Faust</i>	H. Berlioz*
Waltz from the <i>Serenade for String Orchestra</i> , op. 48	P.I. Tchaikovsky*
<i>Danzon No. 2</i>	A. Marquez*

*The **Badelt/Ricketts** *Pirates* medley was scored for 2 flutes, oboe, 2 clarinets, bass clarinet, bassoon, 3 trumpets, 4 horns, 2 trombones, bass trombone, tuba, timpani, percussion, piano, and strings. **Mozart** wrote the *Wind Serenade*, K. 361, for 2 oboes, 2 clarinets, 2 basset horns, 4 horns, 2 bassoons, and double bass. **Berlioz** composed the Hungarian March for piccolo, 2 flutes, 2 oboes, 2 clarinets, 2 bassoons, 4 horns, 2 trumpets, 2 cornets, 3 trombones, tuba, ophicleide, timpani, percussion, and strings (34 violins, 14 violas, 12 cellos, and 6 double basses). **Tchaikovsky** wrote his *Serenade* for full string orchestra (26 violins, 10 violas, 8 cellos, and 6 double basses). **Marquez** scored *Danzon No. 2* for large contemporary orchestra consisting of 2 flutes, 2 oboes, 2 clarinets, 2 bassoons, 4 horns, 2 trumpets, 2 trombones, bass trombone, tuba, timpani, percussion, piano, and strings (38 violins, 14 violas, 12 cellos, and 8 double basses).

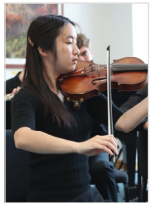
OCO has always had an unusual combination of instruments, so the above works have been re-orchestrated to suit OCO's current instrumentation: 6 violins, 1 cello, 2 flutes, alto flute, alto sax, trumpet, euphonium, tenor trombone, piano, timpani, and percussion.



Serena Chen '19 is from Plano, TX. Her major is Engineering with Computing. She has been playing violin for 11 years. Next fall she'll enter the PhD program in Computer Science at Carnegie Mellon University.



Kyle Emmi '21 is a trumpet player from Clovis, CA. In his spare time he enjoys building rockets and explaining to people where Clovis is on a map of California. This is Kyle's second year in OCO and he has immensely enjoyed being a part of this special group. In addition to this ensemble, Kyle is also an active member of the Olin Rock Orchestra and Olin Jazz Orchestra.



Anne Ku '19, from Palo Alto, CA, is an Electrical and Computer Engineering major. She is currently in her fourth and final year in the Olin Conductorless Orchestra. She has been an active musician for 15 years and does not plan to stop. After graduation she'll be working as a software developer for the Chan Zuckerberg Initiative.



Joseph Lee '19 was born and raised in Huntsville, AL, and has enjoyed playing timpani in OCO since first coming to Olin in 2015. He also loves composing music and plays both piano and harp. He spent a semester in Canterbury, England studying music composition where one of his compositions was performed live. In his free time he works on many projects, including building a harp and a 200 mph high speed drone. After graduation he'll be working at FormLabs in Cambridge, MA.



Jack Mao '22 is an alto saxophone player from Grafton, MA. He loves music. Outside of music, Jack enjoys basketball, coding, video games, and learning about outer space.



Eric Miller '19, from Granville, OH, has been playing flute for 13 years. He is majoring in Robotics, which he describes as "basically just an excuse to take whatever classes I want to." After graduation he will be working at Skydio in Redwood City, CA.



Paul Nadan '20 is from San Carlos, CA, and has been playing music since he picked up the euphonium in fifth grade. He added the trombone to his repertoire two years later to play in a jazz band, and this is his third year playing trombone in OCO. Besides music, his interests include books, board games, robots, and space exploration. He is majoring in Mechanical Engineering [Aerospace].



Margaret Rosner '20 is a violinist from Tacoma, WA. She is majoring in Mechanical Engineering. This year she is co-navigator of OCO.



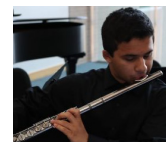
Jeremy Ryan '20 is from Medical Lake, WA. In addition to flute and piccolo, he also plays (with various aptitude) accordion, mallet percussion, musical saw, ping pong, Sibelius, and piano. He is majoring in Electrical and Computer Engineering.



Jonah Spicher '21 is from Casper, WY. He has played piano for more than ten years, spending three years as an accompanist for several different choirs. He is majoring in Electrical and Computer Engineering.



Aditya Sudhakar '22 is a euphonium player from Katy, TX. In his spare time he enjoys building racecars and is an active member of Olin Electric Motorsports.



Shashank Swaminathan '22 is a flute player from Novi, MI. In his spare time he enjoys building boats. Shashank is also an active member of Olin Aquatic Robotic Systems and an amateur woodworker.