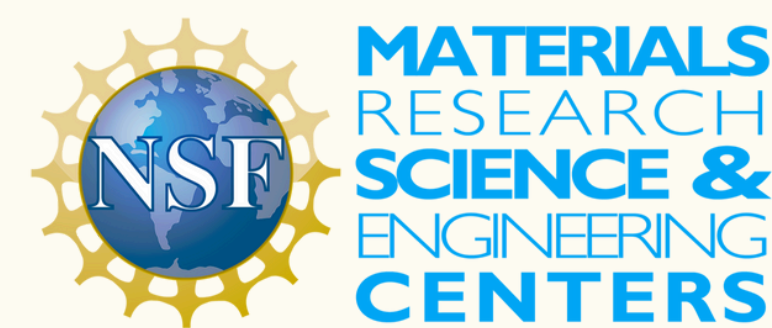




# SMART



**(Science, Mathematics And Research Training)**

**<http://ultracold.uchicago.edu/SMART2024>**

*“K12 High School Science Education Outreach”*

**July 12-16, 2024**

The four-day program will take place from 7/12 to 7/16, with a break day on 7/14. Field trips will depart from the University of Chicago campus and transportation will be provided. **Students will need to provide their own transportation to the University of Chicago.**

**For questions please contact:**

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or Dr. Cheng Chin <[cchin@uchicago.edu](mailto:cchin@uchicago.edu)>, (773) 702-7192

## **Friday, July 12 | Argonne Tour and Crater Experiment**

7:45 AM	Arrival and Breakfast at 5720 S Ellis Ave, Kersten Physics Teaching Center (KPTC), Room 206	
8:15 AM	Bus to Argonne National Laboratory	5720 S. Ellis Ave
9:00 AM- 12:00 PM	<b>Argonne National Lab Tour</b>	Argonne National Lab
1:00 PM	Back to campus and lunch	KPTC 206
1:30 PM- 4:00 PM	<b>Crater formation Experiment</b>	KPTC 213
4:00 PM	Departure from 5720 S. Ellis Ave	

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## Saturday, July 13 | Astro day - Observatory Tour

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12:00 PM

Meet at 929 E. 57th Street,  
Gordon Center for Integrative Science (GCIS)

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12:45 AM

Arrive at **Adler Planetarium**

1300 S DuSable  
Lake Shore Drive

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4:30 PM

Dinner outside Adler Planetarium

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5:30 PM

Leave for **Architecture Boat Tour Chicago River** (6:30 pm tour)

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6:00 PM

Arrive at Wendella boats dock

400 N. Michigan Avenue

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8:00 PM

Leave for Northwestern Observatory

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8:30 PM

**Star Gazing at  
Dearborn Observatory**

2131 Tech Drive

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10:00 PM

Head back to Hyde Park

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10:45 PM

Arrive at UChicago campus

929 E. 57th Street

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## Sunday, July 14 | Day Off, Enjoy Your Free Time!

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## Monday, July 15 | Material Science & Levitation Experiments

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9:45 AM                      Arrival and Breakfast at 5720 S Ellis Ave,  
Kersten Physics Teaching Center (KPTC), Room 206

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10:00 AM-                      **3D Printing and Prototyping**                      KPTC 206  
12:00 PM

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12:00 PM                      Lunch with REU Students                      KPTC 206

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12:30 PM                      MRSEC Lab tour                      GCIS ESB09

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1:00 PM                      Thermal Levitation Demo                      GCIS ESB11A

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1:30 PM                      Acoustic levitation Demo                      GCIS E09

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2:00 PM                      **Liquid Nitrogen Experiment**                      KPTC 206

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3:00 PM                      Engineering and  
Computational Surgery                      KPTC 206

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4:00 PM                      Departure from 5720 S. Ellis Ave

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## Tuesday, July 16 | Solar Car/Quantum Entanglement/BBQ

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9:45 AM	Arrival and Breakfast at 5720 S Ellis Ave, Kersten Physics Teaching Center (KPTC), Room 206	
10:00 AM- 12:00 PM	<b>Solar Car Building and Competition</b>	KPTC 206
12:00 PM	Lunch with REU Students	KPTC 206
12:45 PM	Introduction to quantum science	KPTC 206
1:00 PM- 3:30 PM	<b>Quantum entanglement and key distribution</b>	KPTC 006
4:00 PM- 5:00 PM	<b>BBQ Party (Parents are welcome!)</b>	KPTC 206 and balcony