

# OPTYCs: An Update on Activities

Chesapeake Section - AAPT  
2023 April 1  
James Madison University  
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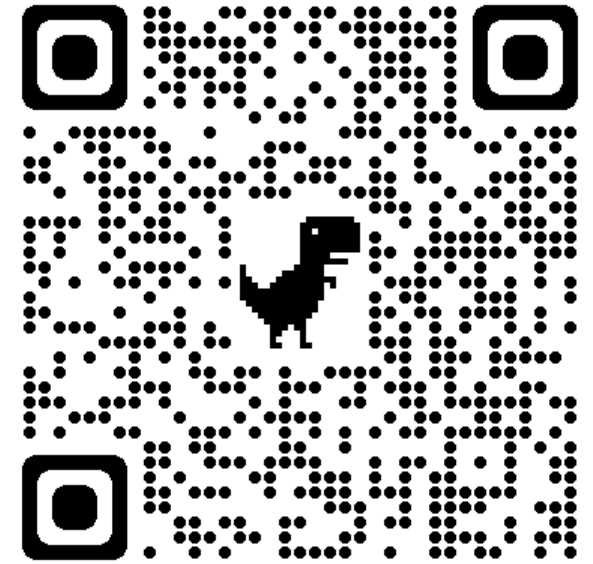
# What Is OPTYCs?

Community

Culture

Collaboration

A virtual  
**one-stop shop**  
for people teaching  
physics-related topics  
at two-year colleges  
(TYCs)



[optycs.aapt.org](https://optycs.aapt.org)



**OPTYCs**

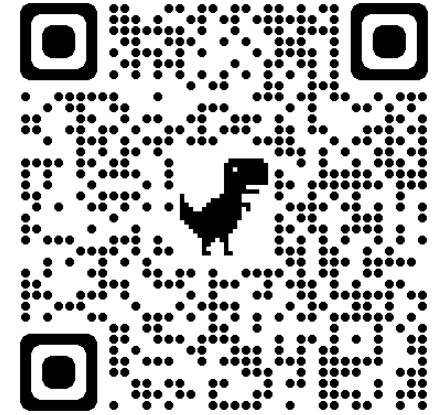


# Programs & Deliverables

1. Continuing Professional Development Workshops
2. New Faculty Development Series
3. Leadership Institute
4. Diversity, Equity, and Inclusion Change Teams
5. Tandem Conferences
6. Mentorship Groups
7. TYC Program Guidelines
8. PER Facilitation
9. AIP Survey
10. Digital Materials

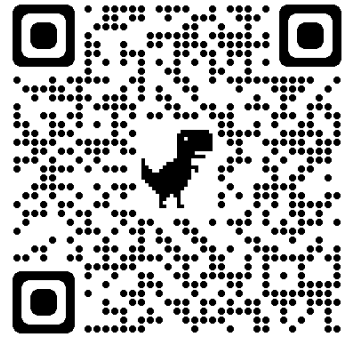
# 1. Professional Development Workshops

- Various topics, lengths, modalities
- Some TYC participant support for travel and projects
- Upcoming Workshops: **everyone is welcome!**
  - April 22: Interactive Video-Enhanced Tutorials (virtual)
  - May 12: Embedding Equity-Mindedness in Physics Questions (virtual)
  - May 20: Teaching Kinematics Using Spreadsheets (virtual)
- Program Coordinators: Tom O’Kuma, Joe Heafner, Kris Lui



## 2. New Faculty Development Series

- **16-month-long immersive, cohort training program**
  - 2 months online discussions & journal club
  - 3 days in-person intense training
  - 14 months to implement changes, with mentoring
  - 2 day in-person Commencement conference (AAPT National Meeting)
- Cohort 1 begins April 2023 (Applications closed)
- Cohort 2 applications open Fall 2024
- Program Coordinators: Krista Wood, Brooke Haag, Dwain Desbien, Tom O’Kuma



# 3. Leadership Institute

- 1-year training program on effecting change
  - 2-months asynchronous literature review and discussion (virtual)
  - 1-day in-person intensive workshop
  - 1-year project development and implementation plan to positively lead
    - Supported with mentoring groups & regular virtual meetings
- Cohort 1 begins Jan 2024
- Applications open July 2023
- Program Coordinators: Krista Wood, Brooke Haag, Dwain Desbien

# 4. DEI Immersive Discussion Program

- Two-Year training program on augmenting DEI efforts in STEM
  - 2-day initial discussion session
  - Year 1: Implementing change in local environment
  - Year 2: Facilitating broader change at home institutions
  - 1-day reunion to disseminate
  - Supported with mentoring groups & regular virtual meetings
- Cohort 1 begins Jan 2024
- Applications open July 2023
- Program Coordinators: Kris Lui, Dwain Desbien, Sherry Savrda

# 5. Tandem Meetings

- 1-day conference in tandem with AAPT National Meetings
  - Hosted at a nearby TYC (if possible)
  - Workshops, posters, discussions devoted to TYCs
- **Save the Date: 2023 July 15 (Sacramento, CA)**
  - 9 Workshops offered, including: Alternative grading strategies, Using NASA data to teach physics, Maintaining student clubs, Undergraduate research experiences, and more!
  - Submit a Poster Presentation! Abstracts accepted until April 14.
- Program Coordinators: Tom O’Kuma, Joe Heafner, Kris Lui





# 6. Mentorship Program – Now Open

- **Types of Mentorship:**
  - Horizontal (peer/mutual) groups
  - Vertical (traditional) mentoring
  - Learning Communities
- TYC Mentorship Groups may be formed around:
  - Demographic identities
  - Teaching projects
  - Professional concerns
- Program Coordinators: David Marasco, Renee Lathrop, Kris Lui



# 7. TYC Program Guidelines - Revision

- *AAPT Guidelines for Two Year College Physics Programs*
  - Established national standards for creating & assessing TYC programs
  - Goal: Update this 20-year-old publication with **new edition Spring 2026**
- **Status Report:**
  - Created working group
  - Determining updated recommendations
  - Documenting evidence in support of recommendations
  - Planning for an intensive working session at AAPT's Summer Meeting
- Program Coordinators: Sherry Savrda, Dwain Desbien

# 8. PER Facilitation

- Establish a culture of PER at/with TYCs
  - Regular virtual journal club discussions
  - Support TYC faculty in data collection and dissemination
  - Form collaborations with existing PER groups
- **Upcoming Sessions: Everyone welcome!**
  - March 31: Mechanics and E&M Assessment Tools: An Overview
  - April 28: PhysPort Data Explorer Mini-Workshop
  - Previous sessions available on YouTube (Channel @optyics5337)
- Program Coordinators: Sherry Savrda, Karim Diff, Anthony Escudro

# 9. AIP Survey

- AIP's Statistical Research Center will administer & analyze a **comprehensive survey** of TYC physics
  - In-depth surveys have occurred once per decade
  - Funded by TYC grants
  - Use data to inform best practices
- Spring 2023: Division Lead / Department Chair Survey
- Spring 2024: Faculty Survey
- Program Coordinators: Kris Lui, Sherry Savrda, Karim Diff

# 10. Digital Materials

- Establish a **Virtual Library**:
  - Create virtual, asynchronous workshop-like programs
  - Develop on-demand professional development materials
  - Curate educational resources
  - Archive past projects, successful initiatives, guidelines, etc.
- Available Fall 2025 – Spring 2026
- Program Coordinators: Kris Lui, Dwain Desbien

# Who is Supporting OPTYCs?

**AAPT, NSF and YOU!**

More info on our website



Join the TYC Physics  
Google Group:  
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**OPTYCs**

