

ÁGNES MÓCSY, PhD

PHYSICIST · FILMMAKER · EDUCATOR

Bridging science, cinema, cultures, and the human experience.

agnesmocsy.com · amocsy@pratt.edu
APS Fellow · Humboldt Fellow · Yale Fellow

ANCHORS

Pratt Institute — Professor of Physics & Astronomy, Math & Science Department · Brooklyn, NY · since 2008

Facility for Rare Isotope Beams, Michigan State University — Adjunct Professor · East Lansing, MI · since 2024

Yale University — Jonathan Edwards College Fellow · New Haven, CT · since 2021

Multitudes Studio — Founder & Creative Director · since 2026

Earlier chapters

Visiting Professor & Resident Artist Filmmaker, FRIB, Michigan State University 2021–2024

Visiting Professor & Presidential Visiting Fellow, Yale University 2018–2019

Visiting Associate Professor, Yale University 2016

Visiting Research Scientist, École Polytechnique & IPhT, CEA Saclay, Paris, France 2015

Research Associate, RIKEN Theory Group, Brookhaven National Laboratory 2005–2008

Alexander von Humboldt Fellow, Goethe University, Frankfurt, Germany 2003–2005

Research Associate, The Niels Bohr Institute, Copenhagen, Denmark 2001–2003

FILMOGRAPHY

Documentary and experimental work — where the camera does what equations can't.

Rare Connections (2h14min) — *award-winning documentary feature exploring the human side of nuclear science and its connection the arts and to society*

7 laurels, including Impact DOCS Award of Merit & Special Mention and 4 awards at Liberty Films International Festival, Official Selection at Berlin Women Cinema Festival, and Honorable Mention at Women's Independent Television and Film Festival · rareconnectionsfilm.com — to be released 2026

Multitudes — *experimental documentary on neurodivergent sensory experience* inaugural production, Multitudes Studio · roughcut screened at CUNY Graduate Center, Neurodivergent Joy in Higher Ed, 2026

Two Cultures, One Story — *documentary exploring unexpected connections between art and science* in production

Smashing Matters: Behind The Science Scene (30min) — *film revealing the passion, pressure, and humanity behind cutting-edge nuclear physics research*
premiered at New Haven Documentary Film Festival, smashingmatters.org — 2017

Smashing Matters (6min)— *short documentary advocating for curiosity-driven fundamental research*

Judge, Quantum Shorts Science Film Festival, Singapore · 2023

Consultant, Tribeca Film Institute, NYC · 2020–2021

Narrator, “*Out of Nothing*”, dir. Alex Lazarowich · 2018

SCIENCE × ART

Collaborative works built with artists, writers, scientists and makers — proof that a lab and a studio are the same room.

(In)Coherence — *STEAMplant project with Ellen Berkovitch, Mary Jo Vath & Iliyan Ivanov* · 2021

The Unforeseen — *STEAMplant project with Pamela Breda & Ira Livingstone* · 2019

Physics Meets the Arts — *physics-based art, music, fashion, poetry show with Yale students, Yale University Art Gallery, New Haven* · May 2019

Space Between Spaces — *STEAMplant project with Joseph Morris & Che-Wei Wang* · 2018

The Universe Unrobed — *physics-fashion runway & art exhibit with Pratt students, STEMfest, Under St Marks Theatre, NY* · Jan 2017

Entertaining Science — *physics-fashion runway with Pratt students and film screening, Cornelia Cafe, New York* · June 2016

Glamorous Gluons — *fine art exhibit with Sarah Szabo* · 2014

Sound of the Little Bangs — *animated story & visualization translating data into audiovisual experience with Alexander Doig & Paul Sorensen, on YouTube* · 2010

TALKS & PUBLIC STAGES

Selected keynotes, colloquia, and public appearances, 2012 – 2026. The idea leads; the date follows.

On science, art & culture

From Quarks to Cinematic Sparks *keynote, Science & Art Conference, Boston* · 2026

Nuclear Physics in the Lab, in Society, and in the Arts *APS Global Summit, Denver* · 2026

Belonging Without Conforming: Neurodivergent Joy as Faculty Practice *Neurodivergent Joy Conference, CUNY* · March 2026

From Quarks to Cinematic Sparks *iTHEP Seminar, Tokyo* · Feb 2026

Science as Connection: Blending Physics, Pedagogy, and Cinema *Colloquium, Brookhaven National Laboratory* · Dec 2025

Science as Connection: Blending Physics, Pedagogy, and Cinema *Colloquium, Notre Dame University* · Nov 2025

The Making Of Rare Connections *SLAS presentation, Pratt Institute* · Oct 2025

Rare Connections: Physics and Apfelwine *Collective Dynamics / Little Big Bangs, Frankfurt* · Aug 2025

From Quarks to Cinematic Sparks *IReNA Nuclear Astrophysics Meeting, Athens, OH* · May 2025

Cinema in Physics *panelist, MSU Science Festival* · April 2025

Changing the Physics Landscape through Rare Connections *APS Global Summit, Anaheim* · March 2025

The Making Of Rare Connections *MiniShare, MSCI, Pratt Institute* · March 2025

Meet the Professor: perspectives from my improvised career and overall life experience *FRIB "Meet a FRIB Hero" series* · Oct 2024

Creativity as Bridge Between Communities *APS Division of Nuclear Physics, Boston* · 2024

Rare Connections: the Joint Power of Science and the Arts *themed workshop organization and presentation, SACNAS NDiSTEM Conference, Phoenix, AZ* · 2024

Beyond Rare Connections: the Empowering Marbles *FRIB talk* · April 2024

Communicating to Diverse Audiences *ComSciCon, Rice University, Houston* · Feb 2024

Connected Universes: From Rare Isotopes to Rare Connections *presentation & panel, MSU Science Festival* · 2023/2024

Creating Rare Connections *DNP Meeting, Hawaii* · Oct 2023

Rare Equal Connections: Physics with Enriched Storytelling *Division of Nuclear Physics meeting, APS, New Orleans, LA* · Oct 2022

On an Unpaved Road: From Physics to Filmmaking *American Hungarian Library and Historical Society* · May 2022

The Road From Physics to Filmmaking *SciFest, East Lansing, MI* · March 2022

Physics In Concert With The Arts *Consulate General of Hungary, New York* · Oct 2021

Physics In Concert With The Arts *Galician Contemporary Art Museum, Santiago de Compostela, Spain* · Nov 2019

Physics in the Zeitgeist *keynote, 7th Int'l Symposium Non-Equilibrium Dynamics, Castiglione della Pescaia, Italy* · June 2019

From Theoretical Physics to Film and Social Justice *Jefferson Laboratory, VA* · June 2019

Science Happy Hour at BAR: A Causal Evening about Big Science *co-organizer & panelist, BAR, New Haven, CT* · April 2019

From Theoretical Physics to Art: A Non-Traditional Physics Career *Jefferson Laboratory, VA* · June 2018

The Art of Communicating Science *lectures, 6th Int'l Symposium NED, Varadero, Cuba* · April 2018

Big Bang, Here and Now *Celebration of Hungarian Science, Hungarian Academy of Sciences, Cluj-Napoca, Romania* · Nov 2017

Science Happy Hour at BAR: A Causal Evening about Big Science *co-organizer & panelist, BAR, New Haven, CT* · May 2016

Diversity in science... identities and mind *talk & science based art exhibit, Nogozon, Paris* · Jan 2016

Fusion Project Runway *invited speaker & panelist, AICAD Symposium, California College of the Arts, San Francisco* · Nov 2015

Unexpected Unions: A Physicist Finding Equilibrium between Science, Design, Art *Non-Equilibrium Dynamics Conference, Sicily, Italy* · Sept 2015

When Physics Meets Fashion *Science on Screen, Cinema Arts Centre, Huntington, NY* · July 2015

Big Bang Physics and the Building Blocks of Matter *PubSci panelist, The Boci, Brooklyn, NY* · June 2015

Tour of the Universe *panelist, East Village Planetarium, New York* · May 2015

Science Happy Hour at STEM Fest *panelist, Under St. Marks Theater, New York* · Jan 2015

Art Meets Science Meets Art *panelist, The Commons, University of Kansas* · Nov 2014

Science Happy Hour at BAR: A Causal Evening about Big Science *co-organizer & panelist, BAR, New Haven, CT* · Oct 2014

When Worlds Collide *invited speaker, Int'l Workshop on Collectivity in Relativistic Heavy Ion Collisions, Kolymbari, Crete* · Sept 2014

PubSci: Big Bang Physics and the Building Blocks of Matter *panelist, Hoptron, Patchogue, NY* · March 2014

The Future Well Made: On the Conditions for a Personal Vision *invited panelist, UnionDocs, Brooklyn, NY* · May 2012

On belonging & representation

I approach belonging as a prerequisite for intellectual excellence and scientific creativity — not an administrative goal. Belonging without conforming. Presenter of talks, organizer of panels and workshops.

Belonging in Science: Perspectives and the Power of Storytelling *RIKEN Diversity Initiative Seminar, Tokyo* · Feb 2026

Diversity and Inclusion *plenary, Women in Science Conference, Pécs, Hungary* · Feb 2022

Diversity and Inclusion *discussion co-leader, National Nuclear Physics Summer School, Wright Lab, Yale University* · June 2018

Women and Minorities in Science *invited lecture, St Francis College, Brooklyn, NY* · April 2018

Who Is Doing Physics, Who Isn't, and Why? *keynote & panelist, Undergraduate Women in Physics, Iowa State University* · Jan 2018

Who Is Doing Physics, Who Isn't, and Why? *colloquium, Frankfurt, Germany* · June 2017

Who Is Doing Physics, Who Isn't, and Why? *colloquium, Duke University* · Dec 2016

Diversity and Inclusion in Physics – What Have We Learned *plenary summary, RHIC Users Meeting, Brookhaven National Laboratory* · June 2016

Who Is Doing Physics, Who Isn't, and Why? *colloquium, Michigan State University* · March 2016

Diversity in Science. How are We Doing? *Séminaire général de l'IPhT, CEA Saclay, France* · Dec 2015

Diversity in Physics *invited speaker, Rencontres QGP France, Etretat, France* · Oct 2015

Diversity in Our Field. How are We Doing? *plenary speaker, Hard Probes, McGill University, Montreal* · July 2015

Why Still So Few Women and Minorities? *invited speaker & panelist, Uppsala University, Sweden* · May 2015

Girl Power in STEM *keynote speaker, Stony Brook University* · March 2015

On Being a Woman in Physics: My Experiences *Distinguished Scientists & Engineers from Underrepresented Groups series, University of Minnesota* · Dec 2014

IN THE PRESS

20+ pieces, multiple languages — a sampling.

Cannes Film Awards — profile interview cannesfilmawards.com/interviews/agnes-mocsy · May 2026

Telex.hu — “Katalin Karikó's impressive ascension is just a glitch in the matrix” interview · Aug 2022

With Science Around the World — 30-minute portrait film on YouTube (Hungarian) · 2022

ELLE Magazine Hungary — “Incredible Women” profile · May/June 2021

Háromszék — “Utazás Elegáns Cipőben” (Travel in Elegant Shoes), interview (Hungarian) · 2021

Physics Today — “Mingling Art and Science Opens Minds” · April 2021

Nők Lapja — “Ági's Universe: a Scientific-Fantastic Woman's Story” (Hungarian) · Oct 2020

La Voz de Galicia — on gender discrimination in science (Spanish) · Nov 2019

Yale University Art Gallery Magazine — “Physics Meets The Arts” · Fall 2019

SciArt Initiative — spotlight profile · July 2019

APS News — “Students Interpret Physics Through Art” · May 2019

New Scientist — “Why Are There So Few Women in Physics” · Nov 2018

APS — “Spotlight on Outreach and Engaging the Public” · 2017

MadArtLab — “Owner of a Lonely Quark” · 2016

DxD5 (Design and Diversity) — “Honored Scientist Makes STEAM a Reality in Her Classes” · 2015

Pratt Institute — “Fusion Project Runway” · 2015

Scienceline — “The Fashionista Physicist” · 2015

Brookhaven News — “Physicist Brings New Meaning to Science Education” · 2015

Brookhaven News — “Glamorous Gluons” · 2014

New Scientist — “What Does the Hottest Matter Sound Like” · 2010

IN THE CLASSROOM

Teaching hasn't been separate from my research and creative work: I invite students to experience physics as an imaginative and emotional human endeavor.

Developed courses approaching science in non-traditional ways, through varied mediums. Advised 12 undergraduate and 3 graduate students.

Signature courses

- **Starstruck: Meet Our Universe** — *astronomy & physics through storytelling, art, societal context, and lived experience*
- **Science, the Film Muse** — *pioneering course connecting filmmaking and physics through visual language*
- **Physics Meets the Arts** — *developed at Yale, integrating scientific inquiry primarily with the Yale University Art Gallery collections*
- **Being Human in STEM** — *co-taught a course on identity, belonging, ethics, and humanity in scientific practice at Yale and beyond*
- **Light, Time, and Longing** — *new course exploring physics through cinema, memory, and visual storytelling, summoning films by Wong Kar Wai, Agnès Varda, and Ildikó Enyedi*

Principles & impact

- Science as experience, not merely explanation
- Creativity and rigor are complementary ways of knowing
- Assessment through creation as well as analysis
- Classrooms that welcome variety of ways of thinking, learning, knowing, and belonging
- Fusion Projects — a multimodal assessment method I developed, with student work exhibited publicly, through NY, CT, and Paris
- Mentorship that continues well beyond graduation — students stay in touch for years

THE PHYSICS

Theoretical nuclear physics — strongly interacting matter formed microseconds after the Big Bang, quarkonium, QCD thermodynamics, heavy-ion collisions

- 34 refereed journal publications (13 single-author), one invited review article
- 4,500+ citations
- 86 invited scientific presentations, including seven plenary talks
- International collaborations spanning Europe and North America

Full publication list on request, or via INSPIRE-HEP / Google Scholar.

SERVICE & LEADERSHIP

Chair, Peer Review Committee, MSCI, Pratt Institute since 2026

Peer Review Committee, MSCI, Pratt Institute since 2025

Outreach Committee, Facility for Rare Isotope Beams, Michigan State University 2021–2025

Board of Trustees, Academic Affairs Committee, Pratt Institute 2020–2021

Diversity, Equity, and Inclusion Council, Welcoming Environment Committee, Pratt Institute 2020–2021

Diversity and Inclusion Committee, Yale Physics Department 2018–2019

Chair, Math and Science Department Search Committee, Pratt Institute 2017–2018

Senator (elected), Academic Senate Steering Committee, Pratt Institute 2017–2018

Advisory Council, SisterSMATR, supporting Black and Latina girls in STEM · 2016–2020
Senator, elected to the Faculty Senate, Pratt Institute · 2016–2018
Founding member, STEAMPlant Art and Science Center, Pratt Institute · 2016
Curriculum Committee, Pratt School of Liberal Arts and Sciences · 2016–2017
Elected to the Users Executive Committee, Relativistic Heavy Ion Collider · 2014–2017
NY State Delegation to US Congress, on behalf of US Nuclear Science · 2013–2020
Program Committee, Division of Nuclear Physics, American Physical Society · 2012–2014
Library Head of Public Services Search Committee, Pratt Institute Libraries · 2009–2010
International Advisory Committee, Strangeness in Quark Matter Conference · 2008–2011, 2013

RECOGNITION

Fellow of the American Physical Society (APS Fellow) — elected for science, and innovative explorations of the intersection of science and the arts, and representational · since 2016
Jonathan Edwards College Fellow — Yale University · since 2021
Yale Presidential Visiting Fellow — Yale University · 2018–2019
Woman Physicist of the Month — American Physical Society
Faculty Development Fund Award — Two Cultures in One Story — Pratt Institute
Faculty Development Fund Award — Science, the Film Muse — Pratt Institute
Alexander von Humboldt Research Fellowship — Goethe University, Frankfurt · 2003–2005
Louis T. Dosdall Fellowship — University of Minnesota · 2000–2001
Nordplus Award Scholarship — Niels Bohr Institute, Copenhagen · 1995–1996
Study Scholarship — Eötvös University, Budapest, Hungary
Merit Scholarship — Babeş-Bolyai University, Cluj-Napoca, Romania · 1990–1994
Mellon Research and Travel Grant — Pratt Institute · 2008, 2011, 2013, 2014, 2015

EDUCATION

PhD, Theoretical Physics — University of Minnesota, Minneapolis, MN · 2001
MSc, Theoretical Physics — University of Bergen, Bergen, Norway · 1996
BSc, Physics — Babeş-Bolyai University, Cluj-Napoca, Romania · 1994

AFFILIATIONS

American Physical Society
American Association for the Advancement of Science
Alexander von Humboldt Association