

# Drift: Art and Dark Matter

Educator's Guide

Art  
Museum

## Works by

Nadia Lichtig, Josèfa Ntjam, Anne Riley,  
and Jol Thoms

Curated by Sunny Kerr with assistance  
from Michelle Bunton

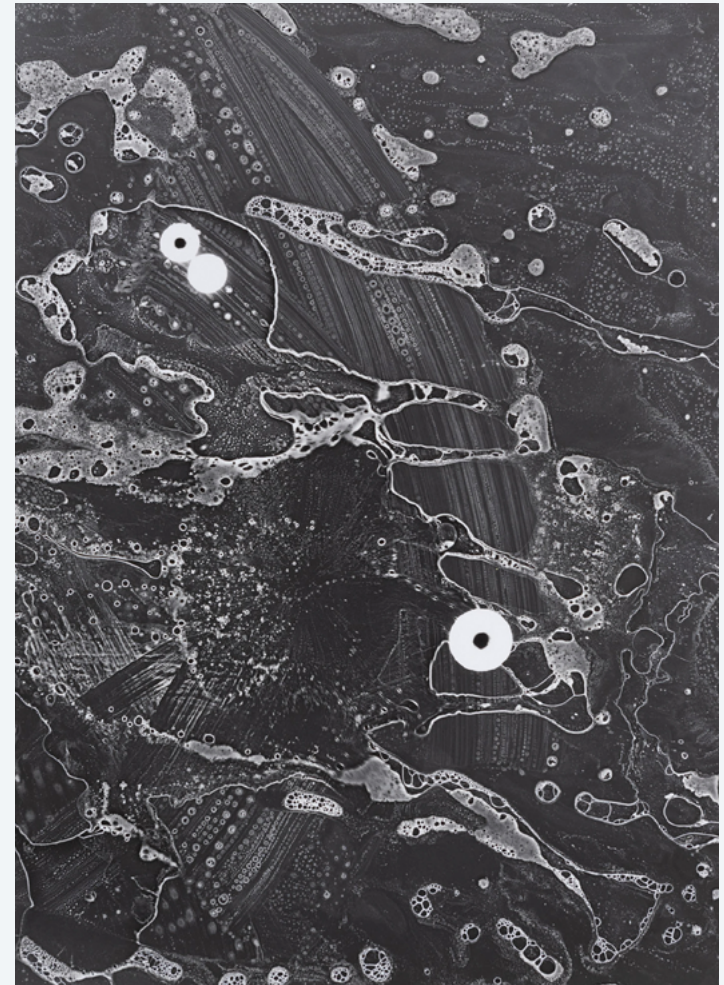
Interpretive content by Hana Nikčević,  
Assistant Registrar, Art Museum at the  
University of Toronto, with reference to  
curatorial writing, artist statements, and  
exhibition outlines provided by the Agnes  
Etherington Art Centre

Cover: Nadia Lichtig, *Blank  
Spots*, 2021–ongoing,  
frottage on canvas, theatre  
lights, sound. Collection  
of the artist. Photo: Tim  
Forbes.

Right: Nadia Lichtig, *Dust  
(Reinigungsarbeiten) 1*,  
2020, photogram on paper.  
Collection of the artist.

## Drift: Art and Dark Matter

May 11–October 8, 2022

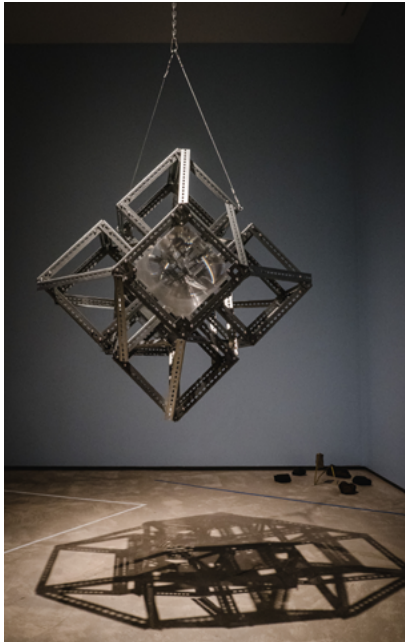


## What if our universe is shaped by forces we can't sense?

Imperceptible and undecipherable but, seemingly, of fundamental significance to the structure of the universe, dark matter is one of science's great mysteries. The stuff has been detected only indirectly, and astrophysicists continue to pursue its precise nature.

In *Drift: Art and Dark Matter*, artists join the search. Working in residence at SNOLAB, a dark matter research facility two kilometres underground in Sudbury, Ontario, *Drift's* four artists conferred with scientists, plumbed the practice of astroparticle physics, and

considered the invisible unknown. Their artworks, born of this experience, ask: what can the ideas and processes underpinning and arising from the search for dark matter tell us about our world? Likewise—ranging from sculpture to video, from choreographed breath to glowing liquid—these multimedia works inquire into the potentials of aesthetic experience: as we try to understand dark matter and the nature of our universe, what might the artwork newly—uniquely, perhaps subversively—offer to the sensorium?



**Left:** Jol Thoms, *The Bulk: Frameworks*, 2020, Fresnel lenses, steel slotted angle posts, disco ball motor. Installation view from *Drift: Art and Dark Matter* at the Agnes Etherington Art Centre. Photo: Tim Forbes.

**Middle:** Artist Jol Thoms documents researchers working on CUTE (a Cryogenic Underground Test Facility) at SNOLAB. Photo: Gerry Kingsley.



**Top Right:** Jol Thoms, *Orthomorph (Tunneling)*, 2020, digital print. Courtesy of the artist.

**Bottom Right:** Artist Joséfa Ntjam delivers an artist talk to SNOLAB staff and the *Drift: Art and Dark Matter* team. Photo: Zac Kenny.





## About the Exhibition

*Drift: Art and Dark Matter* addresses issues of relevance to a broad range of disciplines—including but not limited to art history, physics and astrophysics, history and philosophy of science, cinema studies, and postcolonial studies—and we would be delighted to welcome your students to the exhibition. We offer exhibition tours led by our staff and student gallery attendants, and we also invite self-guided visits. If you are interested in booking a class visit or discussing the options, please send us an email at [artmuseum@utoronto.ca](mailto:artmuseum@utoronto.ca).

This Educator's Guide introduces the exhibition and its context and provides prompts, discussion questions, and select suggestions for further reading. The discussion questions are aimed at students of various levels and backgrounds; some may require more academic experience than others, but most aim to be open-ended and, above all, to lend themselves to conversation.

### How did *Drift* come about?

*Drift: Art and Dark Matter* began as an artist residency. In 2018, the Arthur B. McDonald Canadian Astroparticle Physics Research Institute (based at Queen's University) and SNOLAB (Sudbury Neutrino Observatory Laboratory) invited the Agnes Etherington Art Centre at Queen's University to learn about dark matter. Sunny Kerr, curator of contemporary art at the Agnes Etherington Art Centre, in turn invited four artists to take part in the project: Nadia Lichtig, Josëfa Ntjam, Anne Riley, and Jol Thoms. Artists and curator

thus ventured two kilometres underground to spend time in the subterranean SNOLAB, the physics research facility housed in the horizontal tunnels of Vale's Creighton Mine, an active copper, nickel, and platinum mine in Sudbury, Ontario.

During two extensive site visits to SNOLAB in July and October of 2019, the artists spoke with the physicists, chemists and engineers collaborating on the lab's search for dark matter. In Sudbury as well as Kingston, artists, scientists and other scholars shared their work, addressing such topics as dark matter and neutrino physics alongside ancient underground water and Anishinaabe cosmology, comparing and contrasting their aims and approaches, and learning from both artist talks and hands-on research experiments.

### What is dark matter?

This is an open question and the mystery that makes dark matter so fascinating. Astrophysicists are trying to figure out what dark matter is made of—and, by extension, what the majority of the universe is made of—but the difficulty arises from the fact that dark matter cannot be directly detected.

What scientists *do* know, however, is that dark matter—whatever it is—is out there. Its presence can be inferred from the gravitational pull it exerts on “regular,” perceptible matter. Over the years, as astronomers and astrophysicists have studied the cosmos, they

Artist Nadia Lichtig  
photographing the drift  
entrance to SNOLAB.  
Photo: Zac Kenny.



have noticed that the gravitational effects they observe are too strong to result from the universe's visible matter, the stars and galaxies that they can see. Since astronomer Fritz Zwicky's earliest theorizations in the 1930s, scientists have suspected the existence of dark matter for various reasons, including:

**Gravitational lensing.** When we look at the night sky, we see light emitted by stars and galaxies, which are systems of millions or billions of stars, held together by gravitational force of a centre of mass (our Milky Way galaxy, for instance, has a supermassive black hole at its centre holding everything together). As light from distant galaxies travels to earth, that light passes through nearer galaxy clusters (groups of hundreds or thousands of galaxies, held together by gravity). The gravitational pull of these galaxy clusters is so strong that it significantly bends light; as such, as light travels to the earth through these galaxy clusters, the light gets distorted. As a result, distant galaxies, which are essentially round or oval-shaped, appear as thin, arced lines when seen through nearer galaxy clusters. This is called “gravitational lensing.” Astronomers have noticed, however, that the *amount* of distortion exhibited by distant galaxies seems to be too great to have been caused by the galaxy clusters they see—those clusters appear far too small to have the gravitational pull necessary to distort the light as much as it's been distorted. Scientists thus hypothesize that galaxy clusters must have a much greater mass than their visible stars (and gases, and

other elements) would provide, and they think this additional mass is coming from invisible matter—dark matter.

**Flat rotation curves.** In the 1970s, astronomer Vera Rubin demonstrated that the speed at which stars orbit around the centres of spiral galaxies is high throughout the entire galaxy—even at the outer edges. This doesn't fit Kepler's and Newton's gravitational theory, which suggests that the speed at which stars move should decrease as their distance from the centre of gravity increases and the pull of gravity thus lessens. (Our own solar system demonstrates this: planets far from the sun circle it more slowly than planets close to it; Jupiter, for instance, orbits the sun at less than half the speed of the Earth.) The explanation had to be that galaxies had more mass—mass we couldn't see—that extended beyond their visible outer edges. This invisible mass is identified as dark matter. (Rubin's observation is termed “flat rotation curves” because, when star rotation speed was graphed, the resulting line was flat—but it would be expected to curve downwards, indicating decreasing rotation speeds as stars' distance from the galaxy centre increased.)

### Why can't we see dark matter?

Because it doesn't interact with light. Our visible world consists of objects that produce or reflect light; we see the sun because it emits light, and we see a tree because it reflects the sun's light. Dark matter, meanwhile, neither produces nor reflects light.

### How do SNOLAB’s researchers look for dark matter?

Physicists have postulated that dark matter, like all known matter, is composed of particles. One hypothesis is that these particles are “weakly interacting massive particles” (WIMPs)—hypothetical particles that react with only one of the four fundamental forces that define particle interactions, gravity (and, perhaps, another unknown weak force). Scientists think that WIMPs, if they exist, might sometimes come into contact with regular matter; if so, these interactions could then be picked up by a specialized detector. That detector is located at SNOLAB: the Super CDMS (Cryogenic Dark Matter Search) detector. This is one of the ways in which scientists attempt to locate dark matter.

### Why is SNOLAB underground?

Those particle interactions that might point to the presence of dark matter are nearly imperceptible. In our everyday environment, those interactions would be drowned out by background radiation, produced by the radiation constantly hitting the earth from the sun and other stars. The two kilometres of rock that lie between the Earth’s surface and SNOLAB, however, insulate the laboratory from cosmic radiation. This is what it means when SNOLAB is termed “clean”—the laboratories have a low background radiation, allowing scientists to detect minimally perceptible particle interactions.

### Why drift?

The exhibition takes its title from SNOLAB’s physical framework: a horizontal mining tunnel is called a “drift.” Leading with this reference is intended to distil the exhibition’s initial interests: *Drift* sought to explore not simply the concepts and theories proper to dark matter but also, uniquely, the labour, landscapes, cultures, and histories inextricable from its search. Despite this underground etymology, the term also points outwards, towards the universe—as we drift through space, held in place at so many levels of magnitude by so many forces, we might open ourselves to the unknown, the arbitrary, the strange, and the unimaginable. After all, the entity that appears to make up the majority of the universe, to hold it all together, and to have brought about its creation—dark matter—continues to escape us.

### How do the artists approach dark matter?

If the dark matter research underway at SNOLAB is aimed primarily at detecting dark matter, to moving ever closer to its material nature and behaviour, *Drift*’s four artists might be seen to invert this approach: they locate dark matter as a point of conceptual origin and expand outwards. Instead of seeking to represent or explain dark matter, Ntjam, Thoms, Lichtig, and Riley explore the potentials of thinking alongside it. What might we gain, for instance, by using dark matter as inspiration to embrace unknowability? What informs the urge to detect and define dark matter? What might it do to our worldview to understand that the world we perceive is but a fraction of what actually exists?

Dark matter is so named because it can’t be sensed. Art, meanwhile, traditionally foregrounds aesthetic—sensory—experience. Could artists contribute to the search for dark matter by creating something like an associated sensory experience? This was one of the *Drift*’s guiding questions. The aesthetic experiences offered by *Drift*’s four artists engage our relation to dark matter and elaborate, extrapolate, and refine to reflect on divergent themes. What, they ask, can dark matter—the way we think about dark matter, the way we search for it—tell us about our world?

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### Key Themes

Interdisciplinarity; art and science (their differences and similarities, the potentials of their collaboration); embodiment and sensory experience; ways of knowing, situated knowledge, and embracing not knowing; institutional frameworks and disciplinary conventions; the visual and material culture of science; Western science and colonialism; different temporalities; planetary community.

## Select Artwork Introductions

# Jol Thoms

## *n-Land: the holographic (principle)*

Jol Thoms's *n-Land: the holographic (principle)* assembles a video, archival documents, maps, rocks, and sculptural constructions to investigate SNOLAB from an expanded array of perspectives. This approach is informed by the work's eponymous "holographic principle," a hypothesis from theoretical physics (specifically, string theory) proposing that our three-dimensional world is a hologram projected off a distant two-dimensional surface. Likewise, string theory and M-theory respectively suggest that our universe has ten or eleven dimensions, of which we only experience four (our three-dimensional world, passing through time)—those other seven dimensions are coiled in on themselves, too small to detect.

Thoms presents us with a view of SNOLAB from more dimensions, disclosing the lab as embedded in far-reaching and dynamic histories of land and universe. 1.85 billion years ago, a comet hit what is now Sudbury, and its impact drew molten metal from within the Earth; this produced the copper, nickel, and other metal deposits in the Sudbury region, which, in turn, influenced the development of Sudbury into one of the world's foremost mining sites. The billions of dollars extracted from this mining site since 1901 are central to the ongoing treaty dispute between the region's Anishinabek nations and both Ontario and Canada, representing just one instance of the settler government's ongoing dispossession of Indigenous peoples. Meanwhile, the joint framework of the land—those two kilometres of rock—plus the mine complex's network of tunnels has established an ideal environment for an astrophysical investigation for rare, hard-to-detect particles: SNOLAB, clean and insulated.

### About the Artist

Jol Thoms is a Canadian-born, European-based artist, author and sound designer. Both his written and moving-image work engage posthumanism, feminist science studies, general ecology and the environmental implications of pervasive technical/sensing devices. In the fields of neutrino and dark matter physics he collaborates with renowned physics institutes around the world. These "laboratory-landscapes" are the focus of his practice led PhD at the University of Westminster. In 2017 Thoms was a fellow of Schloss Solitude and resident artist at the Bosch Campus for Research and Advanced Engineering.

Thoms graduated with an Honors BA in Philosophy, Art History and Visual Studies from the University of Toronto (2009) and later studied under Prof. Simon Starling at the Städelschule in Frankfurt (2013). Between 2014 and 2016 he developed and taught an experimental creative-research program for architecture students at the University of Braunschweig with then interim director Tomás Saraceno. In 2016 Thoms won the MERU Art\*Science Award for his film *G240vßß*, which was installed in the *Blind Faith: Between the Cognitive and the Visceral in Contemporary Art* group exhibition at Haus der Kunst, Munich.



Jol Thoms, *n-land: the holographic (principle)*, 2020 (4k video with 5.1 sound, brass with rocks from Dynamic Earth Trading Post, digital pigment print on paper, oversized poster plaqued print, aluminum disk) and *The Bulk: Frameworks I*, 2020 (Fresnel lenses, steel slotted angle posts, disco ball motor). Installation view, Art Museum at the University of Toronto. Photo: Toni Hafkenscheid.



# Josèfa Ntjam

## *Luciferin Drop* and *Myceaqua Vitae*

Josèfa Ntjam's *Luciferin Drop* is a large glass vessel—a fluidly warped and oversized Kjeldahl flask—set upon a stand in the shape of four strange, spiky human feet. The flask contains a glowing green liquid; the titular luciferin is the compound used by bioluminescent organisms to produce light. Ntjam's luminous solution, however, is not as otherworldly in substance as its appearance might suggest: it's a concoction of water and highlighter fluid, illuminated from above by the ultraviolet beam of a single black light bulb. The glow we see emanating from *Luciferin Drop*'s verdant liquid isn't ultraviolet light, though—ultraviolet light is invisible to humans. When certain substances—known as fluorescent substances—absorb ultraviolet light, they convert it into light of a longer wavelength: light we can see. *Luciferin Drop*, thanks to its highlighter-fluid composition, is fluorescent; met with invisible ultraviolet light, it absorbs, changes, and releases that light in a form we can perceive. Ntjam might thus offer us something akin to the experience of exploring our universe: when we gaze at this alien glow in the gallery, just as when an astrophysicist observes the gravitational lensing on a galaxy, we study the perceptible effects of an imperceptible source.<sup>1</sup>

*Myceaqua Vitae* tracks the journey of a liquid droplet—the fantastical luminous substance lending its name to the video—as it slips through a galaxy and falls to earth. It touches down in the form of *Luciferin Drop*, glowing amidst a barren, rocky landscape. Ntjam, through voiceover, narrates a pre-planetary origin story; as matter remixes and recombines, an entity—the luminous droplet?—suddenly speaks out from the perspective of an omniscient force: “I gave the human some riddles to search for to get them out of the boredom of a world too big for them to swallow,” she intones. As we “dig the earth to understand the stars, catch the light to detect

the intangible,” all to “listen to the universe and its incessant movement,” this entity evades: despite all attempts at classification, it proclaims, “I still escape the existence that was assigned to me.” As we try to understand our universe—and everything within it—what lies beyond our preconceived categories and frameworks of interpretation?

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### About the Artist

Josèfa Ntjam was born in 1992 in Metz (FR), and currently lives and works in Paris. Ntjam is part of a generation of artists who grew up with the internet, communicating and sending images by electromagnetic wave. Working with video, text, installation, performance and photomontage, Ntjam creates a story with every piece that acts as a reflection of the world around her. Drawing connections to science fiction and the cosmos, Ntjam has said of her work, “I sat there some time ago with Sun Ra in his Spaceship experimenting with a series of alternative stories. An exoteric syncretism with which I travel as a vessel in perpetual motion.”

Ntjam studied in Amiens and Dakar (Cheikh Anta Diop University) and graduated from l'Ecole Nationale Supérieure d'Art, Bourges (FR) and Ecole Nationale Supérieure d'Art, Paris-Cergy (FR). Her works and performance have been shown at numerous venues such as the 15th Biennial of Lyon, DOC! Paris, a la Zentral (CH), Palais de Tokyo, Beton Salon, La Cite internationale des arts, la Bienanale de Dakar (SN), Let Us Rflect Festival (FR), FRAC de Caen, and CAC Bretigny.

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1. This observation was made by Nobel Prize-winning physicist Arthur B. McDonald and shared with us by curator Sunny Kerr.



Top: Josèfa Ntjam, *Myceaqua Vitae*, 2020 (video with sound) and *Organic Nebula*, 2019 (carpet, photomontage). Collection of the artist. Installation view, Art Museum at the University of Toronto. Photo: Toni Hafkenscheid.

Right: Josèfa Ntjam, *Luciferin Drop*, 2020, glass, metal, ABS filament and luminescent liquid. Collection of the artist. Installation view, Art Museum at the University of Toronto. Photo: Toni Hafkenscheid.



# Nadia Lichtig

## *Blank Spots*

Nadia Lichtig's *Blank Spots* presents four pieces of canvas, each suspended on the gallery wall and uniquely marked with earth-toned rubbings and drawings. Animating these hanging sheets is a choreographed accompaniment of light and sound: theatre lights illuminate areas of each canvas, moving from one section to another in time with a soundtrack of breathing and vocalizing. Lichtig's canvas rubbings are produced at sites of historical crises; for these particular rubbings, the artist travelled to the Reichsbahnbunker, an air-raid shelter in Berlin, and marked her canvases with the area's dust and dirt.

Scientists theorize that dark matter is decaying matter left over from the Big Bang; if so, dark matter is a sort of material trace of history, imperceptible to humans but nevertheless shaping our present. Lichtig, too, is presenting us with material traces of history (even if we can't actually read any social-historical content in the marks). Lichtig may thus ask the question: what other overlooked remnants of history—unnoticed or suppressed—play a part in our current reality? And—considering her abstracted rubbings, her wordless voiceover—might we ever be able to understand these histories?

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### About the Artist

Nadia Lichtig is an artist currently living in the South of France. In her multilayered work, voice is transposed into various media including painting, print, sculpture, photography, performance, soundscape and song—each medium approached not as a field to be mastered, but as a source of possibilities to question our ability to decipher the present. Visual and aural aspects entangle in her performances.

Lichtig studied linguistics at the LMU Munich in Germany and at the Ecole des Beaux-Arts de Paris, France with Jean-Luc Vilmouth, where she graduated with honours in 2001, before assisting Mike Kelley in Los Angeles, USA the same year. She taught at the Shrishti School of Art and Technology, Bangalore, India as a visiting professor in 2006, at the Ecole des Beaux-Arts of Valence in 2007, and is professor of Fine Arts at the Ecole Supérieure des Beaux-arts of Montpellier (MOCO-ESBA), France since 2009. She has collaborated with musicians who are also visual artists, such as Bertrand Georges (Audible), Christian Bouyjou (Popopfalse), Nicolu (La Chatte), Nina Canal (Ut) and Michael Moorley (The dead C). Nadia Lichtig worked and works under several group names and pseudonyms (until 2009: EchoparkK, Falseparklocation, Skrietch, Ghosttrap and Nanana).



Nadia Lichtig, *Blank Spots*, 2021–ongoing, frottage on canvas, theatre lights, sound and digital sequence, 10 minutes. Installation view, Art Museum at the University of Toronto. Photo: Toni Hafkenscheid.



## Anne Riley *the heart of the matter* and *dark matter garden*

Anne Riley's *the heart of the matter* is tucked into a small room off of the main galleries. In a recorded video call, Riley speaks about learning the Dene language during the pandemic. She had wondered how it would feel—emotionally, somatically—to be able to tell herself “I love you” in Dene; the experience would differ significantly from that of speaking those words in English, she intuits, in some invisible but definite way. In this video, however, Riley chooses not to share the phrase itself. As a Dene artist, Riley constantly negotiates her engagements with art institutions: what does she share, and what does she keep for herself? That unspoken sacred phrase, imperceptible but understood to exist, introduces the potential of embracing unknowability. Riley asks us to reflect on the urge to detect dark matter.

Riley also contributed another work to *Drift*, a site-specific, long-term project: *dark matter garden*. This unconventional garden is a mound of soil and rich compost, situated by the artist in front of the Agnes Etherington Art Centre and intended to nourish all manner of life in its surrounds. Thinking with dark matter's immense historicity and potential role in the origin and maintenance of the universe, *dark matter garden* escapes the itinerance and ephemerality of the travelling art exhibition, foregrounding rootedness, community, and expansive, ecological timescales.

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### About the Artist

Anne Riley is a multidisciplinary artist living as an uninvited Slavey Dene/German guest from Fort Nelson First Nation on the unceded Territories of the Musqueam, Squamish and Tsleil-waututh Nations. Her work explores different ways of being and becoming, touch, and Indigeneity. Riley received her BFA from the University of Texas at Austin in 2012. She has exhibited both in the United States and Canada. Currently she is working on a public art project commissioned by the City of Vancouver with her collaborator, T'uy'tanat Cease Wyss. Wyss and Riley's project *A Constellation of Remediation* consists of Indigenous remediation gardens planted throughout the city, decolonizing and healing the dirt back to soil. The duo was longlisted for the 2021 Sobey Art Award.

Riley's *that brings the other nearly as close as oneself*, included in the 2015 exhibition *Every Little Bit Hurts* at Western Front, foregrounded touch, impression and embodied experience. It featured a wall drawing created by the artist rubbing, dragging and moving her body across the gallery wall wearing raw-dyed denim. “I’m interested in queer touch as a radical act,” she says. “It’s not always possible because of fear. But I’m also investigating first touch between mother and child. I have the same hands as my mother and my great grandmother.”



Anne Riley, *the heart of the matter* (still), 2020, video with sound. Collection of the artist.

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## Discussion Questions

Do these artworks try to represent dark matter? What do you think a sensory experience of dark matter might look, feel, sound like?

What do you think each of these artworks allows us to understand about dark matter that science might not?

We tend to think of science as the discipline through which we gain knowledge: as scientists hypothesize, experiment, discover, and prove, they expand, deepen, and refine our understanding of our world. (The German word for science, after all, translates to “knowledge made.”) Is science the only way we can produce knowledge, though? Can we create knowledge through art? Are there different kinds of knowledge?

What is scientific knowledge? What is objectivity? How does subjectivity factor into science?

What might art and science achieve by collaborating? *How* might art and science work together? Are there already ways in which the two interact? How is a gallery like a laboratory?

The artworks in *Drift* frequently refer to concepts from astrophysics and physics. Are these concepts invoked metaphorically? Literally? Both?

Scientific facts and concepts have been extrapolated to propose theories and frameworks applicable far beyond their scientific origins. What are some examples, and what do you think about these ideas? How might *Drift* do this?

In addition to making use of ideas from physics, *Drift*'s artists comment on physics and science as disciplines with histories, material realities, and biases. What do these artworks propose to us about science? Does science stand apart from society, culture, history?

Scientists know this massive substance that interacts with gravity exists, but they don't know what it is—it's a “known unknown.” They've named that unknown thing “dark matter.” How can it be effective or ineffective to assign names to unknown quantities?

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## Suggested Further Reading

Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007).

Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2010).

Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962).

Chanda Prescod-Weinstein, *The Disordered Cosmos: a Journey into Dark Matter, Spacetime, and Dreams Deferred* (New York, NY: Bold Type Books, 2021).

Sidney Van Den Bergh, “The Early History of Dark Matter,” *Publications of the Astronomical Society of the Pacific* 111, no. 760 (1999): 657–60. <https://doi.org/10.1086/316369>.

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## In-Person Programs

### Curatorial Tour and Artist Performance

*Saturday, September 17, 1pm–2pm*  
*Justina M. Barnicke Gallery*

Curator Sunny Kerr (Agnes Etherington Art Centre) will lead a tour of the exhibition, and artist Nadia Lichtig will present a performance in conjunction with her artwork *Blind Spots*.

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## Online Programs

### Dark Matter and Metaphor

*Wednesday, September 21, 6pm–8pm ET*  
*Online on Zoom*

A panel discussion about astrophysics and its interdisciplinary potentials, featuring U of T astrophysicists Renée Hložek, Miriam Diamond, and David Curtin; and art-and-science researcher Elvira Hufschmid.

### Keynote Lecture: Karen Barad

*Wednesday, September 28, 6pm–8pm ET*  
*Online on Zoom*

Physicist and theorist Karen Barad (University of California, Santa Cruz), whose influential cross-disciplinary writings inspired many of *Drift*'s conceptual directions, presents a keynote lecture.

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## Virtual Spotlights

“Two Moons?: The Shifting Terrain of Art and Science,” an essay on artistic versus scientific perceptions of the cosmos by art historian Paige Hirschey. Published on [artmuseum.utoronto.ca/virtual-spotlights/](https://artmuseum.utoronto.ca/virtual-spotlights/)

Finding Drift: Art and Dark Matter

*Drift: Art and Dark Matter* is located in the Justina M. Barnicke Gallery in Hart House. The Gallery is most easily reached via Hart House’s wheelchair-accessible entrance on Tower Road. To find this entrance, turn off Hoskin Avenue onto Tower Road and continue walking south for about a minute. The entrance will be on your left before you reach Soldier’s Tower (the tower with an archway at ground level). Once inside Hart House, turn left again through the wooden door and proceed to the Justina M. Barnicke Gallery.

Health and Safety

**What to expect:**  
Masks are encouraged at Hart House. Please respect others’ decisions.

Hand sanitizers are available throughout our spaces for public use.

An accessible, inclusive washroom is located on the main level of Hart House (the same level as the Justina M. Barnicke Gallery). Exit the gallery through the glass doors; proceed straight, passing through two wooden doors; turn left at the Reading Room and continue in this direction down the hallway, passing the Hub (the information desk); at the end of this hallway, turn left, and find the accessible washroom immediately to your left. There are also accessible, gendered washrooms on the lower level of Hart House (reachable by elevator) and non-accessible, gendered washrooms on the second floor.

Visiting Guidelines

**Food and beverages**  
Food and beverages of any type are not permitted in the Art Museum. This helps the Art Museum control insects and other pests, which pose risks to the collections.

**Photography**  
Photography and video recording are permitted in the Art Museum’s galleries for personal use only and only with hand-held equipment. No flash photography is permitted.

**Bags, backpacks and personal items**  
We encourage you to leave your valuables and other personal belongings at home. For the safety of our visitors and the artworks on display, large bags and backpacks are not permitted inside the Art Museum; if necessary, you may leave your bags at the front desk.

**Writing materials**  
Ink pens are not permitted in the galleries. Please bring pencils to sketch, draw, or take notes while in the Art Museum.

**Museum conduct**  
All persons entering the Art Museum are subject to video surveillance.

Touching objects on display is not permitted. Even mild touching, over time, will cause damage to artworks. When there are exceptions to this rule—such as when an artwork invites audience interaction—this will be clearly indicated in the exhibition.

Pets are not permitted in the Art Museum. Service animals, such as guide dogs, are allowed.

The Art Museum is a smoke-free space.

Visitors are asked to refrain from shouting, running, and otherwise “outdoor” behaviour.


Please turn your cell phone to the “silent” or “vibrate” setting and be considerate of other visitors when using your phone.


Staff

Barbara Fischer, Executive Director/  
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Mikinaak Migwans, Curator, Indigenous Art  
John G. Hampton, Adjunct Curator  
Seika Boye, Adjunct Curator  
Maureen Smith, Business Coordinator  
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Kate Whiteway, Interim Exhibition Coordinator  
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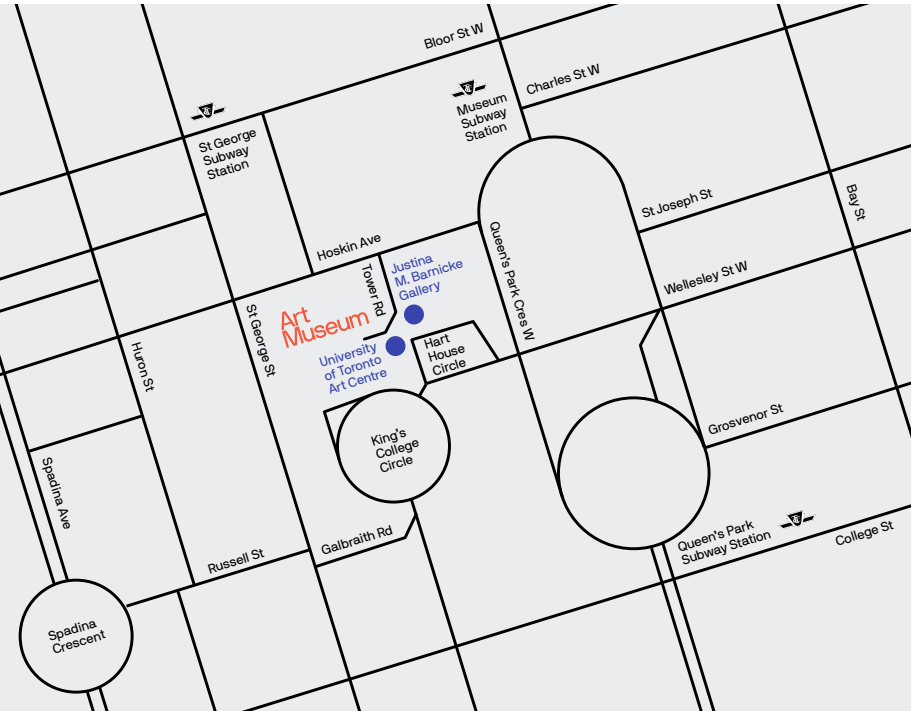
Visiting the Art Museum

**Justina M. Barnicke Gallery**   
7 Hart House Circle  
Toronto, Ontario M5S 3H3  
416.978.8398

**University of Toronto Art Centre**   
15 King’s College Circle  
Toronto, Ontario M5S 3H7  
416.978.1838

Tuesday	12 noon–5pm
Wednesday	12 noon–8pm
Thursday	12 noon–5pm
Friday	12 noon–5pm
Saturday	12 noon–5pm
Sunday	Closed
Monday	Closed

Closed on statutory holidays.  
Admission is FREE.





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