

**SPRING SCHOOL
& WORKSHOP**

INDUCTIVE METAPHYSICS:

Laws and Explanations in Metaphysics and Science

**UNIVERSITY OF DUESSELDORF (ZOOM)
MARCH 24-25, 2021**

Inductive Metaphysics argues that metaphysics should be continuous with the sciences. One recent development of such a continuity is provided by the metaphysical notion of grounding, which links metaphysics and explanation in a novel way. Grounding is the common element in various "in-virtue-of" claims such as "I am in pain in virtue of certain activation patterns of my nervous system (c-fibre firing)". This spring school introductory course and workshop focusses on the relation between metaphysical grounding on the one hand and scientific explanation on the other.

SPEAKERS:

**ANNA-SOFIA MAURIN (UNIVERSITY OF GOTHENBURG)
KRISTIE MILLER (UNIVERSITY OF SYDNEY)
JONATHAN SCHAFER (RUTGERS UNIVERSITY)
MARKUS SCHRENK & SIEGFRIED JAAG
(UNIVERSITY OF DUESSELDORF)
NAOMI THOMPSON (UNIVERSITY OF SOUTHAMPTON)**

This combined online event will take place on March 24–25, 2021, via Zoom. On the first day, the speakers will introduce laws and explanations in metaphysics and science. On the second day, there will be a workshop with talks on the topics outlined and discussed during the introductory part.

The workshop aims at a broad audience interested in questions at the intersection of metaphysics and philosophy of science. Attending the spring school introductory course and workshop is free of charge. The deadline for registrations is March 15, 2021.

More information about the event and the registration form can be found at
<http://dcips.phil.hhu.de/lems/>

DFG Deutsche
Forschungsgemeinschaft

Inductive
Metaphysics

hhu.

ORGANISED BY CHRISTIAN FELDBACHER-ESCAMILLA, SIEGFRIED JAAG, MARKUS SCHRENK, MARIA SEKATSKAYA.
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Spring School & Workshop

Inductive Metaphysics: Laws and Explanations in Metaphysics and Science

Details

- Venue: Online Event (Zoom)
- Date: March 24–25, 2021
- Organisation: Markus Schrenk, Siegfried Jaag, Maria Sekatskaya, Christian J. Feldbacher-Escamilla
- Funding and Support: University of Duesseldorf ([HHU](#)), German Research Foundation ([DFG](#)), Inductive Metaphysics ([IM](#)) – a research group the goal of which is to establish how empirical sources and inductive forms of inference play a role in metaphysical research
- Website: <http://dclps.phil.hhu.de/lems/>

Speakers

- Siegfried Jaag (University of Duesseldorf)
- Anna-Sofia Maurin (University of Gothenburg)
- Kristie Miller (University of Sydney)
- Jonathan Schaffer (Rutgers University)
- Markus Schrenk (University of Duesseldorf)
- Naomi Thompson (University of Southampton)

Aims & Scope

 In recent metaphysics, there has been a great interest in the metaphysical notion of grounding, which links metaphysics and explanation in a novel way. Grounding is claimed to be the common element in various “in-virtue-of” claims such as “I am in pain in virtue of certain activation-patterns of my nervous system (c-fibre firing).”

In philosophy of science, scientific, i.e., causal and nomological explanation has long been the focus of reflection.

This spring school introductory course and workshop focusses on the relation between metaphysical grounding on the one hand and scientific explanation on the other.

In particular, we want to ask questions such as what the characteristic features of these two notions of explanation are, whether grounding explanations in metaphysics can play an analogous role to causal or nomological explanations in the sciences, and whether metaphysical grounding and scientific explanations can be treated in a unified framework.

Schedule Spring School

SPRING SCHOOL: Wednesday, March 24, 2021:

- 09:30–10:30 Siegfried Jaag & Markus Schrenk:
Introduction to Inductive Metaphysics
- 10:30–10:45 *Short Break*
- 10:45–12:15 Kristie Miller:
Theorising About Explanation
- 12:15–12:30 *Short Break*
- 12:30–14:00 Anna-Sofia Maurin:
The Anatomy of Metaphysical Explanation
- 14:00–16:00 *Lunch Break*
- 16:00–17:30 Jonathan Schaffer:
Explanatory Structure

Abstracts Spring School

Siegfried Jaag & Markus Schrenk: Introduction to Inductive Metaphysics

Although already developed in the late 19th century, *Inductive* or *Abductive Metaphysics* (IM) has only recently been explicitly defended by philosophers. IM argues that metaphysics should have a non-exceptional status amongst human inquiries and thus be continuous with the sciences: Empirical sources plus, ideally, (falsifiable) empirical content, inductive or abductive forms of inference, as well as modelling should play prominent roles in metaphysics. In the first part of our introduction, we explicate these recommendations.

In the second part, we explain why the complex of explanations and laws is of special importance in the context of IM. We point to important similarities between how explanations and laws are connected in science and in metaphysics. In the course of this, we will introduce central topics addressed in the lectures and talks at the subsequent spring school and workshop.



Kristie Miller: Theorising About Explanation

What are we trying to do when we develop theories of explanation (whether about scientific explanation, or metaphysical explanation)? Are we aiming to philosophically explicate some notion/concept that is already in use in the sciences or in ordinary practice? If so, how should we go about that task; in particular, how should we incorporate empirical data about the actual use of the notion into our theorising? Or are we, instead, aiming to develop some new philosophical notion that will allow us to do certain kinds of work? If so, how does our theorising connect with ordinary practice (if at all), what value is there in that endeavour, and how should we go about it?

Proposed Reading:

- Reutlinger, Alexander: “Explanation beyond causation? new directions in the philosophy of scientific explanation.” *Philosophy Compass*, 12(2), 1–11, 2017.
- Trout, J.D.: “The psychology of scientific explanation.” *Philosophy Compass*, 2(3), 564–591, 2007.



Anna-Sofia Maurin: The Anatomy of Metaphysical Explanation

In this lecture, I present what I take to be the main contenders when it comes to understanding the nature – “the anatomy” – of metaphysical explanation: realist unionism, realist separatism, and anti- or irrealism. I especially want to focus in on the role of ‘the world’ and of worldly relations in metaphysical explanation (which realists accept and anti-realists deny). Particular focus will be on the nature and role (if any) of grounding in metaphysical explanation.

Proposed Reading: To prepare, the students are invited to read the following texts. It will be perfectly possible to follow the presentation even if you have not read the texts. For more suggestions on literature relevant to the topic of the lecture, please get in touch with Anna-Sofia Maurin.

- Dasgupta, Shamik. “Constitutive explanation.” *Philosophical Issues*, 27(1), 74–97, 2017.
- Maurin, Anna-Sofia: “Grounding and metaphysical explanation: it’s complicated.” *Philosophical Studies*, 176(6), 1573–1594, 2019.
- Thompson, Naomi: “Questions and answers: Metaphysical explanation and the structure of reality.” *Journal of the American Philosophical Association*, 5(1), 98–116, 2019.

**Jonathan Schaffer:
Explanatory Structure**

his is an introduction to structural equation models for explanation, presenting a unified formalism for causal and metaphysical explanation, and discussing the roles of laws, counterfactuals, determination (causation and grounding), interventions, and contrasts in this unified formalism. The aim is to have a toolkit for getting precise about explanation.

Schedule Workshop

WORKSHOP: Thursday, March 25, 2021:

- 10:00–11:00 Kristie Miller:
Metaphysical Explanation: An Empirical Investigation
- 11:00–11:15 *Short Break*
- 11:15–12:15 Naomi Thompson:
Scepticism about Metaphysical Explanation
- 12:15–14:00 *Lunch Break*
- 14:00–15:00 Anna-Sofia Maurin:
The Metaphysics of Metaphysical Explanation
- 15:00–15:15 *Short Break*
- 15:15–16:15 Jonathan Schaffer:
Ground Physicalism

Abstracts Workshop

Kristie Miller:
Metaphysical Explanation: An Empirical Investigation

he literature on metaphysical explanation contains three widely accepted assumptions. First, that the notion of metaphysical explanation with which philosophers are interested is a notion with which the folk are familiar: it is at least continuous with the folk notion. Second, that metaphysical explanations are true propositions of a certain form that are true, (or false), *simpliciter*. Third, that it is at least the case that mostly, if x metaphysically explains y , then y does not metaphysically explain x . On the basis of empirical investigations that we pursued, we argue that at least two of these assumptions are false.

Naomi Thompson:
Scepticism about Metaphysical Explanation

Shat there are metaphysical explanations widely accepted, though there is far less agreement concerning their nature. In this paper, I explore various different routes to 'scepticism' about metaphysical explanation (I use this term loosely). My ultimate aim is not to defend any particular form of scepticism, but rather to use the various sceptical challenges to identify some problems with extant conceptions of metaphysical explanation, and highlight some desiderata for an improved account.



Anna-Sofia Maurin:
The Metaphysics of Metaphysical Explanation

Sn this talk, I tentatively argue that the existence of so-called explanatory gaps is a reason to be realist separatist (rather than anti-realist or conceptualist) about the nature of metaphysical explanation.



Jonathan Schaffer:
Ground Physicalism

Sprovide an articulation, development, and defense of a physicalist worldview, as an example of explanatory metaphysics. This is a physicalism articulated in ground-theoretic terms, developed as an explanatory thesis, and defended as the best explanation of the correlations in nature.