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COLLOQUE

INTERNATIONAL

Knowledge, Understanding, and the Sciences

18 JUIN 2026 : SORBONNE UNIVERSITÉ, SALLE D306-SALLE DE LA FRESQUE

19 JUIN 2026 : SORBONNE UNIVERSITÉ, SALLE D306-SALLE DE LA FRESQUE

20 JUIN 2026 : ENS, AMPHI DUSSANE

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Avec le soutien de la Faculté des Lettres de Sorbonne Université, de l'ANR GRASP, de l'UMR 8011 SND, de l'UMR 8590 IHPST, de l'UMR 8241 RDS, de l'ED 433 et de l'ED 540.

THURSDAY, JUNE 18TH 2026

SORBONNE UNIVERSITÉ, SALLE DE LA FRESQUE

12h45 Timothy Williamson (University of Oxford, Yale University, Università della Svizzera italiana)

WHY KNOWLEDGE IS FIRST

The first part of the lecture will explain, from a broadly evolutionary perspective, why the category of knowledge is central to intelligent life, since the adaptive value of having a mind in the first place is to enable animals to adjust their actions flexibly and appropriately to a complex and rapidly changing environment, which in turn requires them to know what is going on in their environment. This is often a matter of life or death. Acting on knowledge is more adaptive than acting on belief.

An intermediate hypothesis is that what matters is acting on *true* belief. This watering down loses explanatory value, for reasons that will be explained, though the category of belief can be understood in terms of the category of knowledge.

The remainder of the lecture will turn from the priority of knowledge over belief to the priority of cognizing in terms of knowledge over cognizing in terms of belief. Many non-human animals and very small children implicitly distinguish between what others know and what they don't know, but can't distinguish between what others believe and what they don't believe. This asymmetry is the opposite of what many epistemologists and other philosophers had assumed. It can be explained by considerations of efficiency, feasibility, and heuristics in the psychological task of mindreading, in particular by an 'open world' default. (An application will be made to the problematic role of common knowledge assumptions in some social scientific explanations.)

Gettier cases of justified true belief without knowledge are often thought to show that the category of knowledge must be tricky and sophisticated. On the contrary, it will be explained how very simple heuristics usable even by monkeys enable what epistemologists call Gettier cases to be recognized as cases of non-knowledge.

14h05 Break

14h20 Pascal Engel (EHESS)

PRIMITIVISM ABOUT BELIEF, KNOWLEDGE AND UNDERSTANDING

There are various kinds of primitivism in philosophy. Here my focus is on the view that a given concept or property cannot be reduced or explained by other concepts or properties and that is undefinable. In classical philosophy the view is associated with the idea that the concepts or properties in questions are "simple" and "undefinable". Contemporary examples are primitivism about personal identity, or primitivism about reasons.

In recent philosophy, the primitivist view which has received the most attention is Timothy Williamson's conception of *knowledge* as an "unanalysed explainer", irreducible to belief and to justification. On this view, any analysis of knowledge is bound to be either circular or inadequate. It is also primitive as a mental state. It has antecedents in the tradition (Cook Wilson 1926, Antognazza 2024).

Another primitivist view has been proposed about *belief*. On many views belief is a disposition to assent to a proposition. On other views, belief is credence or degree of probability. On yet other view, it is assent to a sufficiently high degree of probability. The primitivist view of credence says that we do not even need a believed proposition: probability is all there is to it. But the primitivist view is compatible with forms of pluralism (Pettigrew 2015)

Can there be a primitivist view of *understanding*? On one kind of view understanding is nothing but explanation and a form of knowledge (Khalifa 2017). On other views it is not a form of knowledge, and it need not even be related to truth (Elgin 2017). On yet another view is a certain kind of explanation through insight, or “grasp” (Strevens 2025).

The fact that a certain kind of view of a given concept or property has a title to be called “primitivist” neither entails that it is not explanatory, nor that it has no important conceptual ties to other concepts or properties. The fact that knowledge is undefinable does not deprive it of its centrality among other epistemic notions, such as belief, evidence, justification, safety and reliability. The fact (if it is a fact) that belief is credence does not entail that it cannot be a relation to propositions. The fact that understanding is a kind of explanation does not entail that it is not illuminated by other kinds of epistemic relations.

One may be tempted here to adopt a less demanding view of reduction or analysis for the notions of belief, knowledge and understanding, like what Peter Strawson called “connective” analysis. Or one can take them to be kinds of functional concepts, in the spirit of Lynch’s (2009) view that truth is a functional property, variously realised in different domains. In any case, that a concept is primitive does not entail that we cannot characterise and explain it. I shall try to assess these options.

15h40 Jean-Baptiste Rauzy (Sorbonne Université)

WILLIAMSON ON HYPERINTENSIONALITY

17h00 Break

17h15 Mona Simion (University of Oxford)

ON PURISM

Traditionally, Epistemic Purism has come under attack from pragmatic encroachment via indirect routes, i.e. via knowledge-action or knowledge-assertion links. The good news for us purists is that we’ve moved past that: as it turns out, the links were guilty of ambiguating on normative types. More recently, however, a more serious (direct) threat has started surfacing: a threat to Epistemic Purism from the normativity of reasoning. The thought, very roughly, goes as follows: the attitudes we form in the process of reasoning through our evidence are governed by epistemic norms that are pragmatically encroached. If so, justification in general is pragmatically encroached. This talk defends purism: I show that the trouble lies with an (admittedly) very popular, but mistaken independence principle concerning the evidential support relation and the evidential having relation. I also sketch a nicely purist view of the epistemic normativity governing our attitudes in the process of reasoning.

FRIDAY, JUNE 19TH 2026

SORBONNE UNIVERSITÉ, SALLE DE LA FRESQUE

12h45 Catherine Z. Elgin (Harvard University)

ITERATIVE EXPLICATION

Carnap maintains that explication refines and sharpens everyday concepts, enabling them to perform rigorous philosophical and scientific functions. Building on Carnap and Chang, I argue that conceptual enhancement involves iterative explication. Each step is an improvement on its predecessor and sets the stage for further conceptual refinement. I draw on familiar examples from the history of philosophy to illustrate the procedure and its benefits.

14h05 Break

14h20 Lucas Escobar (ENS-PSL) and Rayan Geha (Sorbonne Université)

CAN UNDERSTANDING BE KNOWLEDGE-FIRST?

Mona Simion (2025) has argued in her defense of knowledge-first epistemology that the (etiological) function of inquiry is to produce knowledge. This, she argues, does not conflict with the widely held view within the epistemology of understanding that scientific understanding is the goal of inquiry, because understanding implies knowledge. This leads to the claim that understanding can be given a knowledge-first analysis.

The goal of this presentation is to explore this claim. We ask whether scientific understanding can be characterised in knowledge-first terms, what this claim amounts to, and what implications follow from it.

We begin by presenting our view of scientific understanding, according to which it is achieved via explanations (following the simple view (Strevens, 2008)). We argue that for understanding to be characterized in knowledge-first terms, the propositions making up that explanation must count as evidence for the resulting explanation. Given the K=E thesis (Williamson, 2000), this entails that they would each have to be known.

We then argue that a tension arises at this point, if we recognize that at least some of these propositions would have to be falsehoods of the kind Elgin (2017) has called "felicitous". To illustrate this point, we consider an example from the historical sciences where the historical inference depends on theories and regularities (Currie, 2018) that appeal to felicitous falsehoods.

Finally, we present the solutions that are available to the proponent of the view that understanding can be characterized in knowledge-first terms.

15h40 Cyrille Imbert (Archives Poincaré – CNRS – Université de Lorraine)

K-UNDERSTANDING: TOWARD A GRADABLE, RESOURCE-SENSITIVE ACCOUNT OF UNDERSTANDING

17h00 Break

17h15 Michael Strevens (NYU)

GRASP OF EXPLANATIONS AND GRASP OF MEANING

In the epistemology of scientific understanding, a popular view is that to understand why a phenomenon occurs is to grasp a correct explanation of that phenomenon. “Grasp” here itself appears to be a more basic form of understanding, the sort we have when we have a clear sense of how an explanation works. In this talk, I explore the idea that this apparently novel and sui generis notion of grasp is the very same thing that philosophers have in mind when they talk about “knowing the meaning of a word” or having “conceptual mastery” of or “fully possessing” the corresponding concept.

SATURDAY, JUNE 20TH 2026

ENS, AMPHI DUSSANE

12h45 Adrian Currie (University of Exeter)

HOW TO IMAGINE A LOST WORLD: ARTIFACTUALISM, PALEOART AND FOSSILS

*The next question is from one of Prof. Ichthy's relatives: “Where do you get your ideas?”
Ichthy only pauses for the briefest moment:
“I look at things and build things.”*

I’m interested in scientific knowledge of what I call *lost worlds*: past times that diverge in radical ways from the present. Lost worlds contain different entities and processes, operate at different rates and scales: they play by different rules. Lost worlds are weird. One challenge when faced with a lost or putatively lost world concerns *scientific imagination*. Our imaginations are typically impoverished and arbitrary. That is, what we imagine is deeply tied to the familiar, and our imaginations are insufficiently tied to the world. Especially when faced with unfamiliar—lost—worlds, then, what constrains the scientific imagination?

In answering, I’ll develop an artifactualist account of the scientific imagination. Such accounts emphasize the material objects scientists construct and think through. I’ll apply the account to both paleontological and paleoartistic cases, and distinguish it from fictionalism. In closing, I’ll reflect on how we should understand scientific agency in an artifactualist context.

14h05 Break

14h20 Isabelle Drouet (Sorbonne Université)

DESCRIBING AND ASSESSING INDUCTIVE INFERENCES IN THE DEEP PAST SCIENCES: A SCHUMIAN APPROACH

This talk is an epistemological investigation into the inductive inferences of the deep past sciences. Building on Adrian Currie's analyses (especially in *Rock, Bone and Ruin*), I first argue that Currie's pluralism and local justification thesis make fine-grained *description* the primary task of epistemology about this domain, and yet that his framework provides little guidance for carrying out such a description. Drawing on Schum's evidential reasoning approach, I propose to analyse inductive arguments in the deep past sciences as hierarchically structured networks of hypotheses, linked by relations of inductive support and grounded in auxiliary hypotheses. This framework allows for descriptions of varying grain, making it possible to progressively unpack the structure of a given argument and thereby identify its epistemically vulnerable points—paving the way for the assessment of inductive inferences. I illustrate this approach on a palaeontological case study: the inference of ectothermy in an extinct species from a single fossilised bone.

15h40 Philippe Huneman (IHPST - CNRS - Université Paris 1 Panthéon Sorbonne)

EXPLAINING AND UNDERSTANDING : A PLACE FOR NARRATIVES IN EVOLUTIONARY BIOLOGY

While there has been a long-standing debate about the respective roles of explanation and understanding in the sciences, the latter being ascribed to human sciences and ultimately to history, and the former to nomothetic knowledge and natural sciences, the rise of non-nomothetic theories of explanation (Salmons, Strevens, Craver, Cartwright, Glennan, Woodward, etc.) and the acknowledgment that some natural sciences involve history, contributed to blur this divide.

Evolutionary biology represents a major instance of this intrication between history and laws. Evolutionary biology features two epistemic dimensions. First, it provides explanations of adaptation and diversity in the domain of living beings, using mathematical models and morphological and genetic data. Second, it also features a historical dimension: this historicity manifest itself by phenomena of contingency and path-dependence, and makes many biological kinds, such as species or functions, into historical kinds. Among others, Paul Griffiths indeed argued in the 1990s indeed argued for a historical turn in the study of adaptation (1996) The articulation of those two dimensions has been often explored, by insisting on the role of randomness under the form of drift or genetic mutations and combination (see for instance papers by Steve Gould, Dan McShea, John Beatty or Armin Stoltzfus).

History is generally understood by narratives. The question of the role of historicity in evolutionary biology therefore involves exploring the way narrativity intervenes in our understanding of evolution. In this talk I will first review the reasons why historicity essentially affects evolutionary outcomes; then - considering the distinction between understanding the origin and

explaining the maintenance of traits - I will explore the modes under which it is distinctively manifested in population genetics, paleobiology and behavioral ecology. Finally I will argue that the proper features of narration account for the way narrativity articulates the models of evolution by natural selection and the ecological reasons for natural selection, and finally contribute to make evolutionary explanations understandable.

17h00 Break

17h15 Aviezer Tucker (University of Ostrava, Harvard University)

THE GENERATION OF KNOWLEDGE OF THE PAST

Past events send information signals to their futures. The historical sciences utilize information theories to decode received signals to infer knowledge about their origins. The information signals supervene on traceable, if not always traced, historical causal chains. Information signals from the past may *transmit* grounds for knowledge, or *generate grounds* for knowledge, or *decay* knowledge- when mixed with noise, about their origins. I propose a deceptively simple, but highly effective, input-output framework for distinguishing epistemic *transmission* from *generation* and *decay*.

The presentation focuses on the analysis of an epistemic generative process that *ceteris paribus* can *generate* knowledge of the past from inputs that cannot *transmit* grounds for such knowledge, when the inputs are surprising, coherent, and independent. "Rationalist" and "reductionist" arguments may claim that the generation of grounds for knowledge from testimonial and mnemonic historical inputs-signals is impossible in principle because they can only transmit knowledge. These arguments are rebutted by distinguishing epistemic basic inputs from the generative process; and the generation of knowledge from the reduction of its inputs.

All the historical sciences from Philology to Cosmology generate grounds for knowledge of origins from surprising, coherent, and independent decoded information signals. By contrast, the theoretical sciences infer types of events and idealized models of the world that are not the origins of information signals, if for no other reasons, because they have no definite space and time, compare "revolution" with "the French Revolution."

The historical sciences may use analogical reasoning or experiments, as Currie has shown. But the analogies and experiments are used to justify *intermediary information theories* that are used for decoding information nested in present evidence, to infer its historical origins: No information preserving evidence, no knowledge of the past.

Justified historical counterfactuals are generated much like "factual" historiography from decoded present information signals from the past. The epistemic difference between "factual" and "counterfactual" historiography is evidentiary: counterfactuals deliberately bracket off, or suspend belief in, all the evidence that suffices to infer that the counterfactual antecedent is false.

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