Epistemology of Science: A Workshop at the Intersection of Epistemology & Philosophy of Science

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ABSTRACTS
(Additional abstracts TBA)

Katharina Bernhard
Whose Stakes? Pragmatic Encroachment and Scientific Expert Testimony

ABSTRACT: Pragmatic encroachment on knowledge roughly means that one needs to weigh the practical consequences of false positives and false negatives (the "stakes") in order to arrive at a threshold of evidential sufficiency for knowledge. This talk starts off with the assumption that inductive risk considerations in the philosophy of science and pragmatic encroachment on scientific knowledge boil down to the same type of decision problem – at least in context of scientific expert testimony (i.e. when a scientist who is an expert in matters D communicates scientific results regarding D to non-experts in D). Against this backdrop, I will discuss two familiar types of cases that are standardly taken to object to pragmatic encroachment theories. Objection 1 holds that pragmatic encroachment implies that the less we care (the lower our stakes) the easier we know. Objection 2 holds that pragmatic encroachment entails that two individuals may differ in whether they know that p although their epistemic positions are identical. My reply to these objections is this: Both objections rely on the existence of legitimate differences in stakes. What makes knowing p high-stakes for you might not make it high-stakes for me – and that's permissible. Yet, arguably, scientific knowledge is special. It is what Philip Kitcher calls "public knowledge". I will argue that this feature renders plausible the idea that there exist "public stakes", or public utilities. It is these public utilities that create a shared value-background that should determine the values involved in scientific expert testimony (including its uptake). Allowing public values to encroach on scientific knowledge not only renders the above objections insignificant for the case of scientific knowledge. It moreover points at a potentially rich model to identify various forms of epistemic and "moral" culpabilities or failures in the process of producing scientific knowledge, in conveying it via scientific expert testimony, and in testimonial uptake.

Anjan Chakravartty
Belief, Rationality, and Varieties of Scientific Disagreement

ABSTRACT: Disagreement in the sciences takes different forms. I propose a framework for discussing this, distinguishing cases of relatively transient disagreement (RTD), typical of

relatively unsettled science, from relatively stable disagreement (RSD), typical of relatively settled science. According to non-permissive views of epistemic rationality, assuming epistemic peerhood, at least some parties to disagreement have irrational doxastic states. I argue that this is a poor diagnosis of RTD and RSD, thus motivating a moderately permissive account of epistemic rationality in scientific contexts.

Sanford Goldberg (Keynote)
(Social) Epistemology and Philosophy of Science: Towards a Rapprochement

ABSTRACT: This paper takes off from a recent (2016) comment by Otavio Bueno. In his piece in the Oxford Handbook of the Philosophy of Science, Otavio Bueno wrote, "It is a sad fact of contemporary epistemology and philosophy of science that there is very little substantial interaction between the two fields. … This is a missed opportunity. Closer interactions between the two fields would be beneficial to both." In this paper, I explore several topics at the intersection of these fields, and I tentatively suggest how these subfields might benefit from each other as they explore these topics. My ambition is exploratory rather than definitive; the aim is to encourage greater linkages between the two subfields.

Genevieve Hayman
Weak and Strong Epistemic Terminology in Scientific Journal Articles

ABSTRACT: In response to the inductive risk literature of the late 1940s and early 1950s, Richard Jeffrey sought to limit the impact of non-epistemic values in science by eliminating the longstanding requirement of accepting or rejecting hypotheses. According to Jeffrey (1956), the job of the scientist is *not* to accept or reject hypotheses, but rather, to assign mere probabilities to the hypotheses given the available evidence. What Jeffrey did not anticipate was the abundance of weak epistemic language in modern scientific publications. In this talk, I provide evidence that weak epistemic terms or hedges (e.g., 'suggest that' or 'indicate') are more prevalent than strong epistemic terms or boosters (e.g., 'know' or 'prove') in modern scientific articles. Given this result, I argue that the widespread use of epistemically weak language is symptomatic of a unique kind of misleading communication in scientific practice. On the one hand, particular hypotheses seem to be advocated for and supported, but on the other hand, there is not a clear and complete acceptance of these hypotheses, and to what extent one should accept a suggested hypothesis is left underdetermined. As such, authors are able to take credit for supporting true hypotheses while maintaining plausible deniability for false ones, thus evading both Jeffrey's original concern and his suggested resolution.

Joshua Habgood-Coote
What is the epistemic norm for co-authored scientific publications?

ABSTRACT: When several scientists collaborate together, and are jointly listed as authors on the publications that come from that collaboration who bears epistemic responsibility for the claims made in these publications? In the first part of the paper I will canvas some consideration in favour of a knowledge norm of publication, in the second part I will argue that the division of labour involved in collaborative science raises serious problems for the knowledge norm, and in the third part of the paper I will consider some potential ways to think epistemic responsibility for co-authored publications involving a division of labour. We will consider different norms for publication, various accounts of collective assertion, denying that publication is a kind of assertion, endorsing the impropriety of a division of epistemic labour, and appealing to collective knowledge. I will close by suggesting a pluralist picture of epistemic responsibility, according to which different kinds of groups can discharge their epistemic responsibilities in different ways.

Miriam Solomon (Keynote)
On Validators for Psychiatric Categories

ABSTRACT: This paper is about a complex epistemological problem in philosophy of psychiatry: what counts as a "validator" for a DSM (or ICD) psychiatric category and how to aggregate the validators in a decision about how to create, revise, or remove a psychiatric category. Discussing this problem requires building on historical understanding of how the concept of a psychiatric validator has changed in the past 50 years. It is an example of "philosophy of science in practice," and, more broadly, applied epistemology. It illustrates my view that the abstract/applied distinction is more profound than the epistemology/philosophy of science distinction.