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## **The Elusive link Between Scientific Models and their Targets**

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A brief examination of the most recent literature in philosophy of science shows that a host of research in this area studies the *fictionalist* approach to scientific models and related approaches such as van Fraassen's latest book (2008) on scientific representation. Van Fraassen's idea, to put it bluntly, relies on the idea that measurement is the main instrument by the means of which natural sciences achieve the representation aims expressed by scientific models. Moreover, if scientific knowledge is associated with the deployment of some kind of explicative power, this power is closely related to the representation devices developed between the 17<sup>th</sup> and 18<sup>th</sup> century, when these were conceived as involving specific forms of measurement: *measurement locates the target in a theoretically constructed logical space* (van Fraassen 2008, p.2). The main objective of our talk is to delve into the logical features of such kind of approaches: the point is to understand the *location-mechanism*. On one hand we will follow a seminal idea of Olsson and Westlund (2006) that proposed to add to a scientific model a set of open questions (its scientific agenda), and on the other, we will deploy a recent proposal of Rahman/Redmond (2015) to conceive objects of models as functions (dependent-proof objects) of hypothetical judgments as formulated in the frame of constructive type theory. Against such a background, the point is how to relate those functions with the purported targets of the scientific model they constitute. Our main claim is that this achieved by a mapping. The specification mechanism of such a mapping, we claim, is related to those questions that constitute the agenda of the underlying theory and more particularly to the questions related to the relevant measurement theory.

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