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Some Things I Wished I Understood Better (or at all...)¹

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Astrophysics has, since its very beginnings, sought to build our understanding of astronomical phenomena on the solid foundation of our understanding of physical phenomena in the terrestrial context. In areas such as spectroscopy, this approach has had outstanding success; but in other areas, making this connection in an intellectually rigorous way has proved to be very challenging. I will discuss some of the most troublesome examples, and offer some guidelines on how the resulting uncertainties in our understanding of the astrophysical phenomena can be circumscribed.

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