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Abstract for an Invited Paper
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Dark Matter Theory Confronts the Data

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Where and how we look for dark matter is intimately tied to our ideas of dark matter, and conversely, hints from experiment can push theory in new directions. I will review the basic ideas of dark matter and how they have changed over recent years. I will discuss how, irrespective of existing results, this promises to be an exciting time from the perspective of theory. Light WIMPs and WIMPs with non-standard interactions have become more prominent of late, as results from recent experiments have pushed our thinking in new directions. I'll discuss these models as well, and whether they can allay tensions between existing direct search results.