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Structure Theory for FRIB[1]

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The forthcoming Facility for Rare Isotope Beams (FRIB) will produce nuclei close the limits of stability. Understanding and predicting the existence of these nuclei require pushing the nuclear structure theory to new limits. In my talk I will review the present status of the nuclear structure theory and its direction for the forthcoming years. I will emphasize the role of the configuration interaction method and its outcomes, which includes low-lying state spectroscopy, electromagnetic transitions amplitudes, spectroscopic factors, charge-exchange amplitudes, nuclear level densities, spectroscopic factors, and (double) beta decays.

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