Evolution of Magnetic Moments in Cobalt and Nickel Clusters
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University of Texas at Austin — Ferromagnetism in transition-metal clusters has
attracted much interest owing to their enhanced magnetic moments as compared to
those of bulk phases. Here, we investigate the stability and the magnetism of Co and
Ni clusters with various structures using a real-space formalism of pseudopotentials
within the spin-polarized density-functional theory, i.e., the PARSEC code. We will
discuss how the calculated magnetic moments evolve as a function of cluster size
and compare them to experiment.

1We acknowledge support by the National Science Foundation Grant No. DMR
14-35219.