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Precise calculations of the deuteron quadrupole moment

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Until recently, precision calculations of the deuteron quadrupole moment, Qd, have consistently under-predicted its value by several percent, leaving the calculation of this quantity an "unresolved problem" in few body physics. I will report on two recent calculations that predict Qd to better than 1%. One of these uses chiral effective field theory and the other uses the covariant spectator theory, and comparing these very different approaches gives interesting insights into both of them.

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