1135-17-368   **Lida Bentz** (`blida@math.vt.edu`), Department of Mathematics, Virginia Tech, Blacksburg, VA 24061, and **Tevian Dray*** (`tevian@math.oregonstate.edu`), Department of Mathematics, Oregon State University, Corvallis, OR 97331. *Subalgebras of the Split Octonions.*

The proper subalgebras of the octonions $\mathbb{O}$ are well-known: the reals $\mathbb{R}$, the complex numbers $\mathbb{C}$, and the quaternions $\mathbb{H}$. The Cayley–Dickson process also yields split cousins of these division algebras, denoted $\mathbb{C}'$, $\mathbb{H}'$, and $\mathbb{O}'$, but each of these algebras admits additional subalgebras that are not, however, Cayley–Dickson algebras. We present a complete classification of such subalgebras, including examples in dimensions 3, 5, and 6. (Received August 29, 2017)