1143-03-287 **Sean D Cox*** (scox9@vcu.edu), 1015 Floyd Ave, Richmond, VA 23284. *Forcing axioms, approachability, and stationary reflection.*

Foreman and Todorcevic considered several subclasses of $\{W : |W| = \omega_1 \subset W\}$: the internally approachable (IA), internally club (IC), internally stationary (IS), and internally unbounded (IU) sets. ZFC proves that IA $\subseteq$ IC $\subseteq$ IS $\subseteq$ IU. Under the CH, these classes are essentially the same; and (assuming $2^{\omega_1} = \omega_2$) the assertion that *at least one* of the 3 containments is strict (in H_{ω_2}) is equivalent to the failure of the Approachability Property at ω_2. In a series of papers Krueger proved that, under various strong forcing axioms, each of the 3 inclusions is (globally) strict, and also proved that the principle $\mathrm{RP}_{\mathrm{IS}}$ (stationary reflection to internally stationary sets) does not imply $\mathrm{RP}_{\mathrm{IC}}$ (stationary reflection to internally club sets). We will discuss some strengthenings and simplifications of Krueger's theorems, and some "no-go" theorems regarding a question of Krueger (whether $\mathrm{RP}_{\mathrm{IS}}$ is equivalent to $\mathrm{RP}_{\mathrm{IU}}$). (Received August 16, 2018)