Figure 5. *Left:* Dependency of the final Strehl ratio on natural seeing and reference star magnitude. The plot is based on observations with 30 ms single frame exposure time in the SDSS *z'* filter and 1% image selection rate. All Strehl ratios were measured on stars with less than $2''$ separation from the reference star.

Right: Achievable magnitude differences for a 5σ peak detection of a fainter companion to the reference star. All curves refer to a 5% selection rate from 10000 images with 30 ms single frame exposure time, equivalent to an effective integration time of 15 s. The *I*-band magnitude of all three reference stars was ≈ 10 mag.