

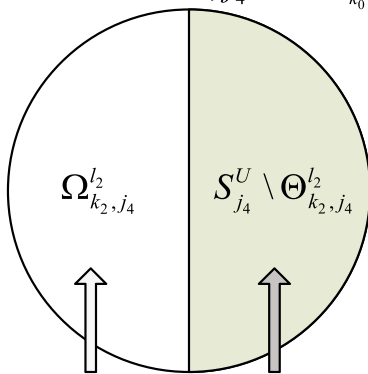
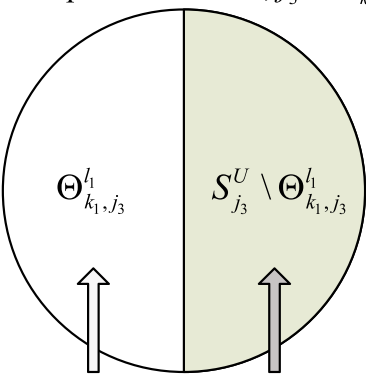
Sensing Stage

$\Psi_{k_0}^{l_0}$: Set of vacant channels

$S \setminus \Psi_{k_0}^{l_0}$: Set of busy

or "spectrum holes"; $j_3 \in \Psi_{k_0}^{l_0}$

channels; $j_4 \in S \setminus \Psi_{k_0}^{l_0}$



SUs detect a "spectrum hole"

a)

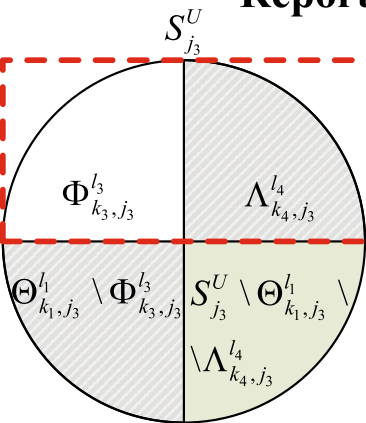
SUs mis-detect a "spectrum hole"

SUs mis-detect a busy channel

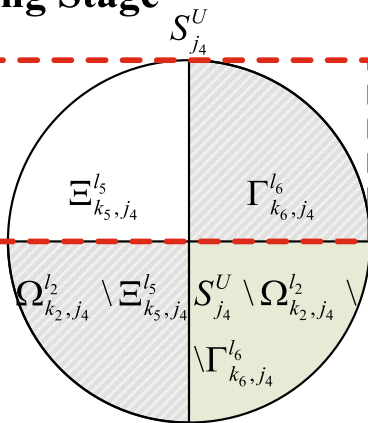
b)

SUs detect a busy channel

Reporting Stage



c)



d)



Set of SUs from whom SU i_4/i_9 collects wrong information (reporting errors)



Set of SUs from whom SU i_4/i_9 collects information that channel j_3 / j_4 is vacant