**Abteilung für Mathematische Logik**
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# Infinite Games
## Sommersemester 2019
### Exercise sheet 5, 27.06.2019

Consider the Banach-Mazur game $G^*(A)$ (on $2^\omega$) for a given flip set $F \subseteq 2^\omega$.

1. Show that if I has a ws in $G^*(F)$, then I also has a ws in $G^*(2^\omega \setminus F)$ (the same for player II).

2. Show that if II has a ws in $G^*(F)$, then I has a ws in $G^*(2^\omega \setminus F)$.

3. Show that if I has a ws in $G^*(F)$, then II has a ws in $G^*(2^\omega \setminus F)$.

4. Show that if there exists an ultrafiler on $\omega$, then there exists a flip set.