CARLOS SANTOS, ISEL-IPL;CEAFEL-University of Lisbon *Affine normal play: a complete analysis of Whackenbush*

Combinatorial Game Theory has also been called Additive Game Theory, whenever the analysis involves sums of independent game components. Such disjunctive sums invoke comparison between games, which allows abstract values to be assigned to them. However, there are rulesets with so-called entailing moves that break the alternating play axiom and/or restrict the other player's options within the disjunctive sum components. To deal with that, it is possible to rebuild the normal play axioms by using so-called terminating games, or infinities, which is dubbed Affine Normal Play (Larsson, Nowakowski, Santos, 2021). At the first Combinatorial Games Workshop at MSRI, John Conway proposed that an effort should be made to devise some game with entailing moves that is non-trivial, but susceptible to a complete analysis - all attempts which have been tried turn out to be not very interesting. Here we analyze the entailing ruleset Whackenbush, a ruleset played like the classic Blue-Red-Hackenbush with an extra carry-on rule: if, by moving, a player drops one or more opponent's edges, they have to play again. This is the first complete solution of a partizan ruleset with entailing moves.