CS TF1 Predator TF2 Handshake Prober 4 Winner21 Hard Prober Grudger TF3 Davis MEM2 Fortress4 Retaliate 3 Fool Me Once Retaliate 2 EvolvedLookerUp1_1_1 Forgetful Grudger Retaliate Limited Retaliate 3 Inverse Punisher Forgiver Limited Retaliate Meta Hunter Limited Retaliate 2 Punisher HTfT Spiteful Tit For Tat **Evolved ANN 5 Evolved ANN** Ripoff Shubik Tester 2TfT Winner12 Evolved FSM 16 Noise 05 PSO Gambler 1 1 1 Omega TFT PSO Gambler 2_2_2 Inverse EvolvedLookerUp2 2 2 PSO Gambler Mem1 Evolved FSM 16 Evolved ANN 5 Noise 05 Level Punisher Thumper Fortress3 PSO Gambler 2_2_2 Noise 05 Evolved HMM 5 Forgetful Fool Me Once Adaptive Pavlov 2006 Adaptive Adaptive Pavlov 2011 Gradual Defector Resurrection **Revised Downing** Evolved FSM 4 Once Bitten **CTfT** Adaptive Tit For Tat TfT Remorseful Prober FTfT Soft Go By Majority: 5 Meta Hunter Aggressive Nice Average Copier Worse and Worse 3 Better and Better Worse and Worse 2 Aggravater Doubler ShortMem Raider Prober 2 Math Constant Hunter Slow Tit For Two Tats 2 General Soft Grudger Soft Grudger VeryBad Soft Joss GrudgerAlternator Soft Go By Majority: 20 Soft Go By Majority: 10 Soft Go By Majority: 40 Soft Go By Majority HTf2T ZD-GTFT-2 ZD-GEN-2 **WSLS** Appeaser Calculator Eatherley Gradual Killer Grumpy Slow Tit For Two Tats Tf2T ZD-Extort-4 Firm But Fair GTFT Grofman Prober 3 Stochastic WSLS ZD-SET-2 Stochastic Cooperator ALLCorALLD Feld Average Copier Eventual Cycle Hunter Sneaky Tit For Tat ZD-Extort-2 v2 ZD-Extort-2 Tullock Prober SelfSteem Random Nydegger Hesitant QLearner Arrogant QLearner Cautious QLearner Risky QLearner Desperate Cycler DDC Cycle Hunter Random Hunter Pun1 Naive Prober Joss ThueMorseInverse **Defector Hunter** Alternator Hunter SolutionB5 Hard Go By Majority: 10 ThueMorse Hard Go By Majority: 20 Alternator Cooperator Cycler DC Hard Go By Majority: 40 EasyGo Fool Me Forever Worse and Worse Hard Go By Majority Negation Cycler CCCDCD Hard Go By Majority: 5 Cycler CCD Suspicious Tit For Tat Bully Cycler CCCD Willing Cooperator Hunter **Tricky Cooperator** Cycler CCCCCD AntiCycler Anti Tit For Tat Tricky Defector π φ Hopeless WShLSt

Opposite Grudger

SolutionB1

0.0

0.2

0.4

0.6

8.0

1.0