

---

# On the asymptotic optimality of the comb strategy for prediction with expert advice

Erhan Bayraktar\*<sup>1</sup>

<sup>1</sup>University of Michigan – United States

## Abstract

For the problem of prediction with expert advice in the adversarial setting with geometric stopping, we compute the exact leading order expansion for the long time behavior of the value function. Then, we use this expansion to prove that as conjectured in Gravin, Peres and Sivan (2016), the comb strategies are indeed asymptotically optimal for the adversary in the case of 4 experts. Joint work with Ibrahim Ekren and Yili Zhang.

---

\*Speaker