

PREVIOUSLY...

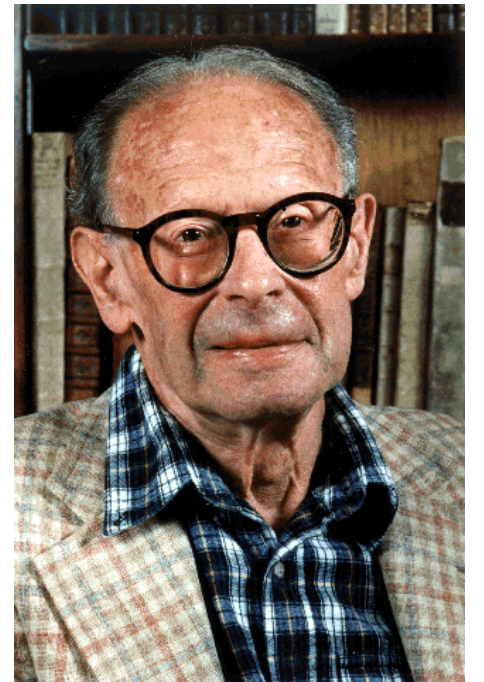
- Isogenies, the dual isogeny
- Inverse limits and the Tate module

$$T_p(\mu) = \varprojlim \mu_{p^n}, \quad T_p(E) = \varprojlim E[p^n]$$

TODAY...

- The Weil pairing

André
Weil
(1906 - 1998)



Recall: $\sigma: \text{Pic}^0(E) \xrightarrow{\sim} E$ s.t. P is the unique pt on E
 $D \longmapsto P$ w/ $D \sim (P) - (O)$.

Corollary Let E be an elliptic curve, and let $D = \sum_{P \in E} n_P \cdot (P)$ be a divisor of degree 0. Then D is principal \square

