

## ΠΑΝΕΠΙΣΤΗΜΙΟ ΙΩΑΝΝΙΝΩΝ



## ΤΜΗΜΑ ΜΑΘΗΜΑΤΙΚΩΝ

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## Polygonal ancient solutions to mean curvature flow

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We study ancient convex collapsed solutions to mean curvature flow  $\{M_t^n\}_{t\in(-\infty,0)}$  in terms of their squash down:

$$\Omega_* = \lim_{t \to -\infty} (-t)^{-1} M_t.$$

We show that  $\Omega_*$  must be a convex body which circumscribes  $\mathbb{S}^1$  and for every such  $\Omega_*$  we construct a solution with this prescribed squash down. Our analysis includes non-compact examples, in which setting we disprove a conjecture of White stating that all eternal solutions must be translators. This is joint work with Langford and Tinaglia.