TBATS: What Does It Stand For?

T — **Trigonometric**
Fourier terms for seasonality
$\sum[a_n\cos(\frac{2\pi nt}{m}) + b_n\sin(\frac{2\pi nt}{m})]$

B — **Box-Cox**
Variance stabilization
$y^{(\omega)} = (y^{\omega} - 1)/\omega$

A — **ARMA**
Error autocorrelation
$\phi(L)d_t = \theta(L)\varepsilon_t$

T — **Trend**
Level + slope (possibly damped)
$\ell_t = \ell_{t-1} + \phi b_{t-1}$

S — **Seasonal**
Multiple seasonal periods
$m_1, m_2, \ldots, m_T$