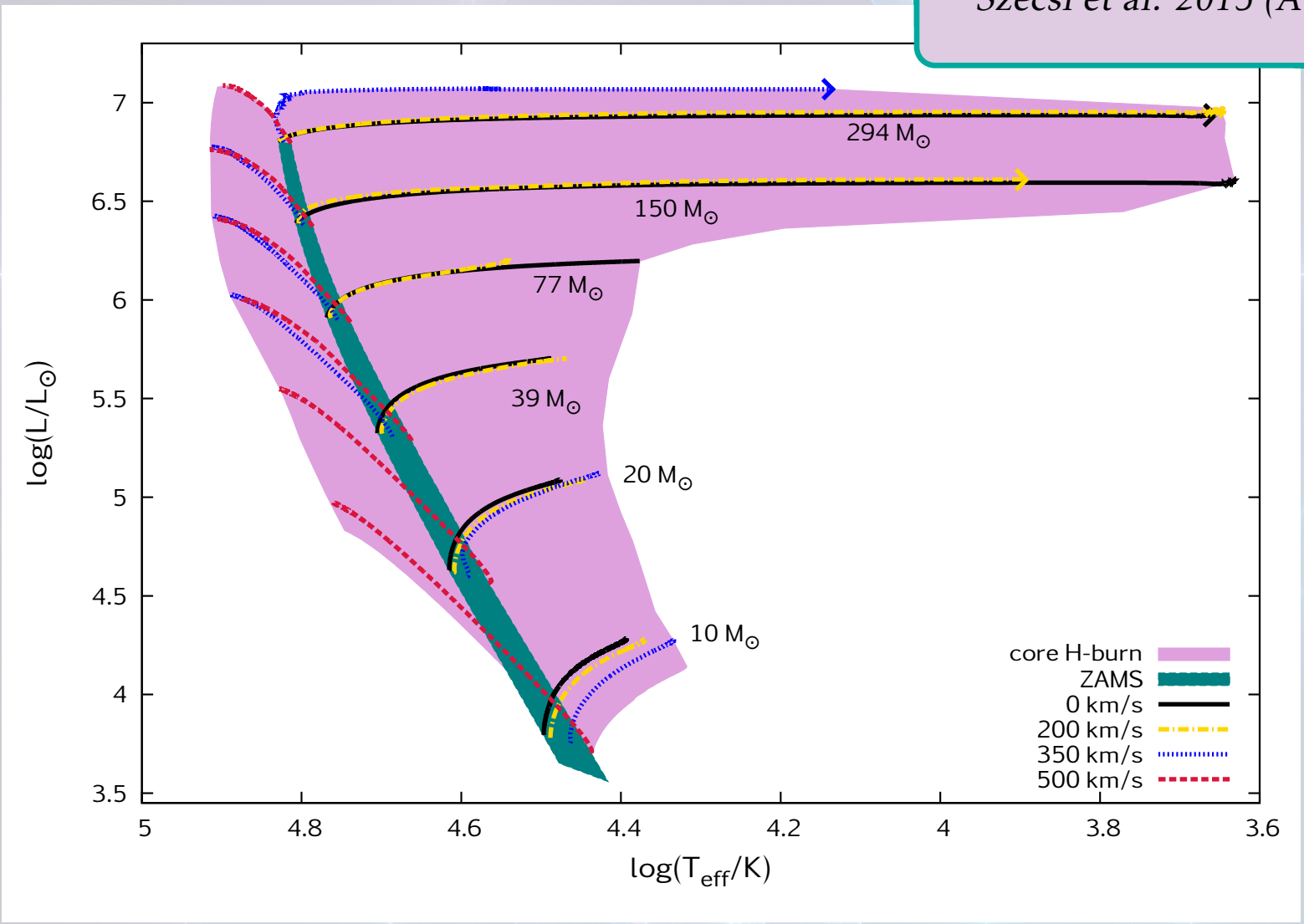
Dorottya Szécsi: TWUIN stars in I Zw 18

$Z=1/50\,Z_\odot$ models from *Szécsi et al. 2015 (A&A)*



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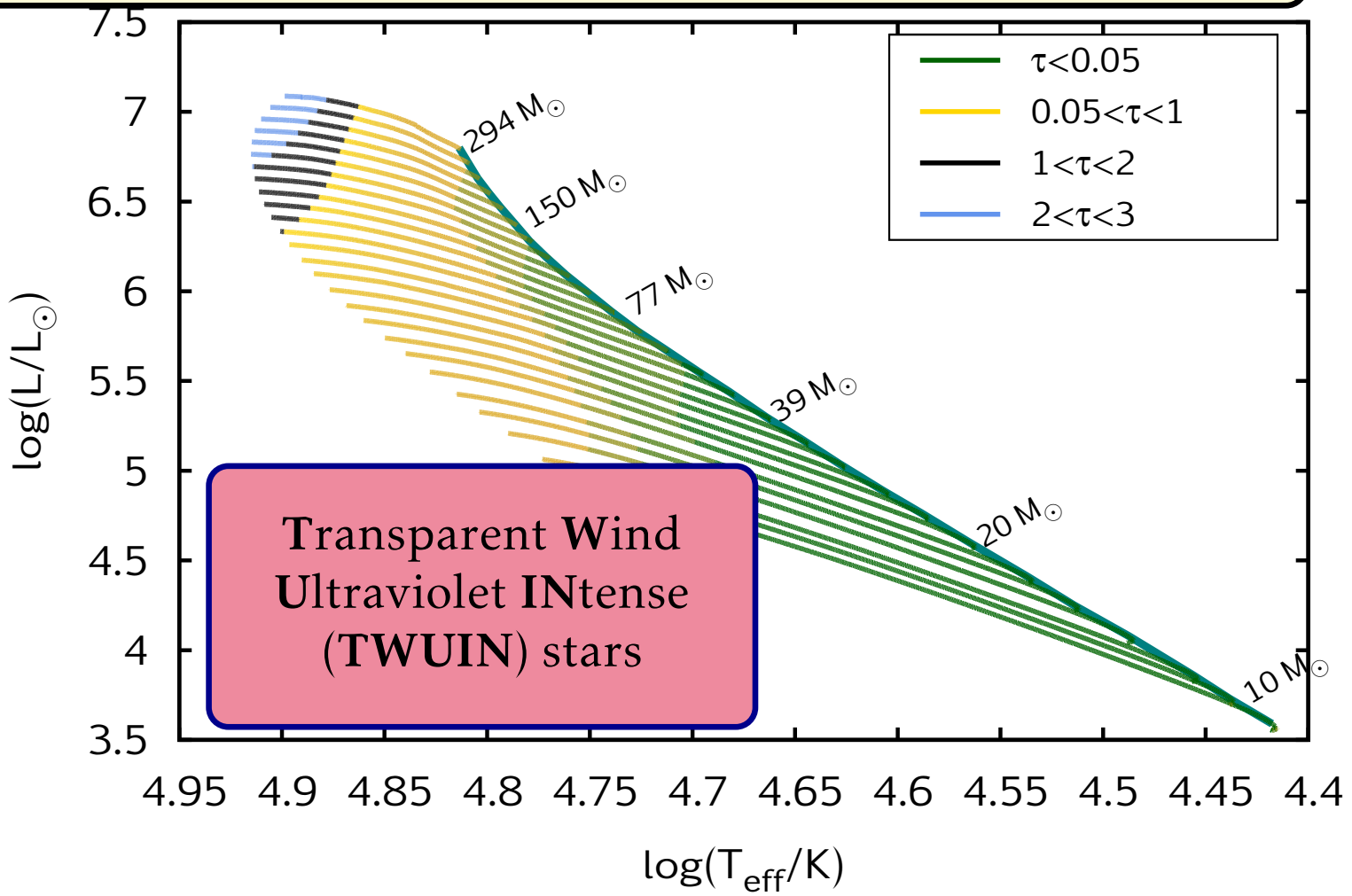
Main sequence lifetime: wind optical depth is $\tau \lesssim 1$



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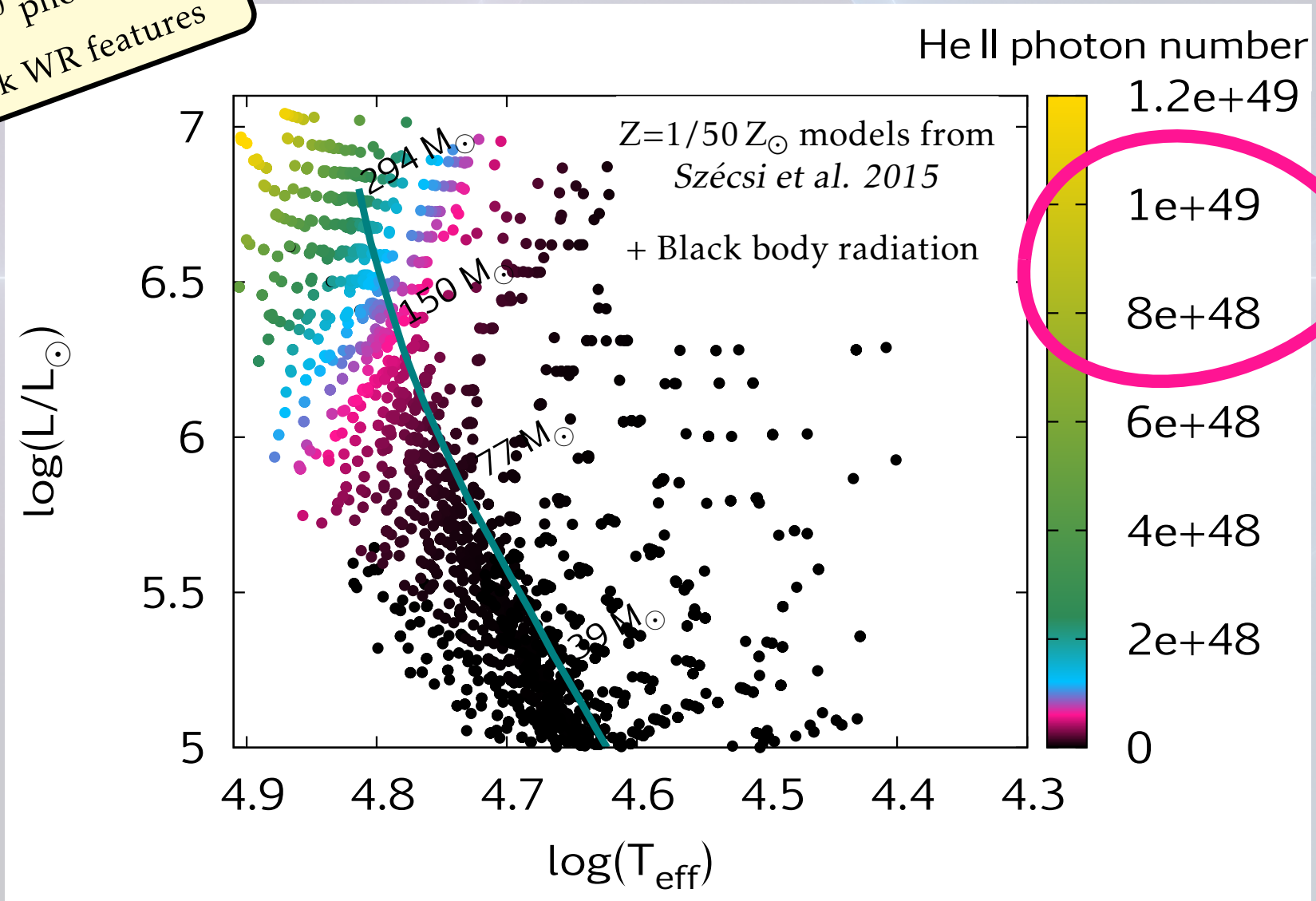
Photoionization

$Q(\mathrm{HeII})^{obs} = 1.3 \cdot 10^{50}$ photons s^{-1}

+ weak WR features



Cowther+06, Shirazi+12, Kehrig+15, Heap+15

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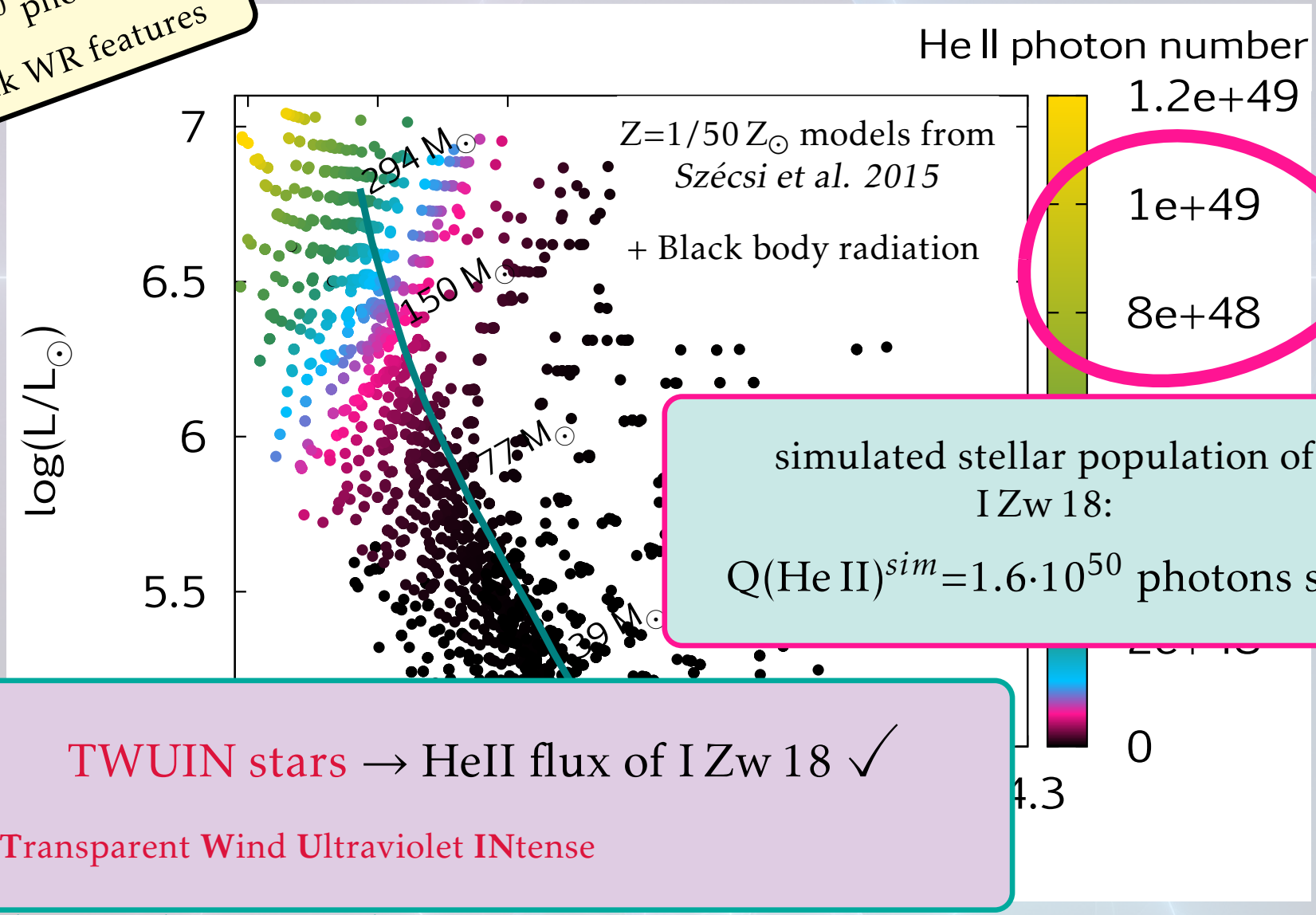

simulated stellar population of I Zw 18:

$Q(\mathrm{He\,II})^{sim} = 1.6 \cdot 10^{50}$ photons s^{-1}

TWUIN stars → HeII flux of I Zw 18 ✓

Transparent **W**ind **U**ltraviolet **IN**tense

Cowther+06, Shirazi+12, Kehrig+15, Heap+15