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Worthey model interpolation engine

This form allows one to create arbitrary mixtures of single-burst populations. The models are those of Worthey 1994, ApJS, 95, 107. Keep ages between 1 and 18 Gyr, and [Fe/H] between –2 and +0.5. In addition, the [Fe/H]<–0.225, age<8 corner is not allowed. The relative (mass) weights you give will be normalized so that the total initial population mass comes out to a million solar masses.

Enter (Age in Gyr – [Fe/H] – relative weight) trios separated by white space:

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Output options:

- Show colors, magnitudes, spectral indices, SBF magnitudes
- Send a file with all of that plus an SED.

Model flavor:

- Default models: Salpeter (2.35) IMF, Y=0.228 + 2.7Z
- IMF exponent up 0.5 (2.85)
- IMF exponent up 1.0 (3.35)
- IMF exponent down 0.5 (1.85)
- IMF exponent down 1.0 (1.35)
- Miller & Scalo (1979) piecewise IMF.
- Shallow Y: Y = 0.228 + 6Z below Z=0.0077; Y = 0.274 above that value
- Min Y: Y = 0.20 below [Fe/H] = –0.5; Y = 0.25 above [Fe/H] = –0.25
- Max Y: Y = 0.30 below [Fe/H] = –0.5; Y = 0.35 above [Fe/H] = –0.25

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