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Angelica Estrada* (aestrada@smith.edu), **Elizabeth Fitzpatrick**, **Oumayma Koulouh**,
Salomea Jankovic and **Yixuan Zhang**. *Non Fibonacci phyllotaxis*. Preliminary report.

Plant organs are often organized in lattice-like patterns, with two families of helices winding in opposite directions around the stem. The number of helices in these two families are usually successive Fibonacci numbers. This work focuses on the case when they are *not*: in many non Fibonacci cases, the number of helices tend to be close to equal. We provide statistical evidence for this phenomenon of “quasi-symmetry”, which has only been recognized recently, and point to a mechanism that explains both types of patterns. (Received September 26, 2017)