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# Propositions

ACCOMPANYING THE THESIS

## Travelling patterns on discrete media

BY

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- (1) It is remarkable to see how the bichromatic fronts can travel in parameter regions where the monochromatic fronts are pinned. (Chapter 2)
- (2) One of the most unexpected phenomena for the trichromatic travelling waves is surely the shape of the cusps for the thresholds  $\Gamma_{[001]}$  and  $\Gamma_{[011]}$ . (Chapter 3)
- (3) It is not clear what the purpose of the threshold  $\Gamma_{[a]}$  actually is. Coincidentally, it is also the only threshold with an analytical expression. (Chapter 3)
- (4) For  $n = 4$  we find a region where travelling multichromatic and monochromatic fronts coexist and can actually be combined. (Chapter 3)
- (5) Most surprisingly, it is also possible to obtain solutions where single points have a non-monotone temporal evolution. (Chapter 3)
- (6) Multichromatic fronts on multidimensional lattices seem to have in general less interesting behaviours. When it comes to structure, sometimes less is more. (Chapter 1)
- (7) By trying to lift the assumption of  $c_g = 0$  one will quickly incur in a wall of desperation and dense complex eigenvalues. (Chapter 4)
- (8) Sometimes a mathematician lacks creativity, some other times computational power. (Chapter 1)
- (9) Any sufficiently advanced mathematics is indistinguishable from magic. Similarly, every sufficiently skilled mathematician is indistinguishable from a wizard.
- (10) Nobody expects the serendipity.