Self-organization or disorder phenomena in biology

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I am going to show, that the blow-ups of solutions, that usually are treated as *something "very bad"*, can in fact describe some *self-organization* phenomena, "positive" (like healing) or "negative" (like society polarization). Mathematically it is the theory of integro-differential equations (*kinetic-type equations*) that is applied to processes in Biology – e.g. swarm formation – [1, 2] or DNA denaturation – [3], Medicine – tendon healing process – [4]. The relationships with classical PDEs models are discussed – see [5, 6].

Keywords: kinetic equations, integro-differential equations, self-organization, disorder

References

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