Dark Matter direct detection at a crossroads

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The hunt for Dark Matter is at a crossroads - after a decade of incredible pace, where five orders of magnitude in parameter space were covered, no unambiguous signal has emerged for interaction between the alleged particles and our normal, baryonic matter. The next generation detectors, aiming at another order of magnitude sensitivity increase, are on the runway, and the question of what will be next takes interesting turns.

I will cover the evidence for the existence of Dark Matter, present the state-of-the-art results from the XENON1T experiment, and play with some novel ideas for the next step, trying to move the lamppost to where Dark Matter may still stay hidden.