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Light WIMPs detection with carbon nanotube arrays.

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We propose a new technique to detect WIMPs with large arrays of carbon nanotubes. Carbon ions, scattered by WIMPs, might be channeled within nanotubes depending on their kinematical conditions. The orientation of nanotube axes with respect to the Cygnus constellation is shown to be effective at discriminating the background. We also show how the interstices among nanotubes cooperate to build the detection signal.
The technique is particularly amenable to search WIMPs with a mass around 10 GeV.

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