

TASC Talk – Why Fusion?

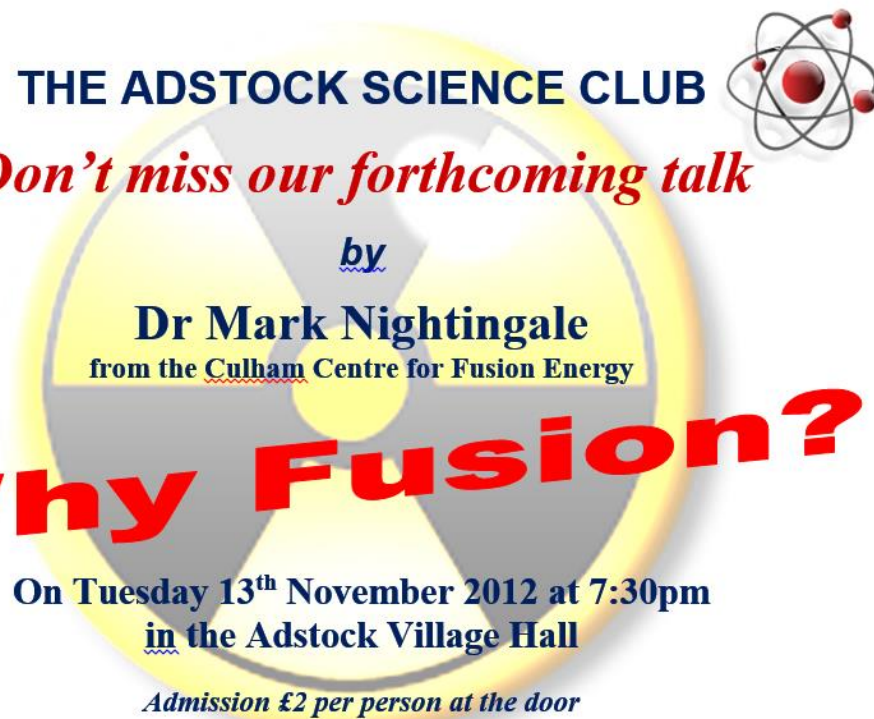
By Dr Mark Nightingale from the Culham Centre for Fusion Energy

Mark began by giving us a short physics lesson where he explained the structure of atoms and the forces that went into keeping the nucleus of atoms bound together. He explained the basic theory that lay behind nuclear fusion where a temperature of around 100 million degrees centigrade would be required to get a fusion reaction started.

The current proof of concept fusion reactor is at the Culham Centre for Fusion Energy research and is the Joint European Torus or JET. This is only capable of sustaining a fusion reaction for a few seconds. JET was commissioned in the 60's and has been able to prove the concept as workable however as it is not big enough to sustain a lasting fusion reaction a new joint venture named ITER is currently under construction which should be able to sustain a reaction for a few hours.

There are many questions still left to be answered before a commercial reactor can be built. It is hoped that these will be answered by ITER. However we are still probably looking at well over the usual 30 years quoted before this becomes a reality.

The talk was very interesting it answered many questions about the science, the process, the costs and the politics but it also left the audience with many more, and due to the short time will only be answered over many years.



THE ADSTOCK SCIENCE CLUB

Don't miss our forthcoming talk

by

Dr Mark Nightingale
from the Culham Centre for Fusion Energy

Why Fusion?

On Tuesday 13th November 2012 at 7:30pm
in the Adstock Village Hall

Admission £2 per person at the door

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