What is the value of undergoing an electrophysiology study?

An electrophysiological study is a diagnostic investigation. The defined purpose is to identify the presence or the nature of an underlying cardiac arrhythmia. The indications have changed considerably both through greater experience in the management of arrhythmia and the availability of novel non-invasive diagnostic manoeuvres. Electrophysiological studies are fundamentally safe necessitating placing wires up to the heart (usually from the femoral vein at the top of the right leg) and then testing the heart’s electrical properties and its predisposition to arrhythmia.

In those with likely AF the indications are rare. Possibly the main outstanding requirement in the absence of a plan for immediate AF ablation is the identification of an underlying cause of the AF. This might, for example, be an aberrant extra electrical connection in the heart causing re-entrant tachycardia. These extra pathways can be ablated without the need for the pre-procedural workup that is otherwise required for the ablation of atrial fibrillation of itself. This requirement may be more likely if the patient is young or have a particular vocation e.g. a pilot.

If your specialist proposes an electrophysiological study then the full rationale and predicted outcomes should be discussed beforehand. A clear value needs to be established prior to proceeding.