A ROUGH GUIDE TO THE LITERATURE ON A¹ HOMOTOPY — VERSION 1.70

INTRODUCTION

I hope to grow this document over time, so a revision number is maintained in the title. The document is in two parts: a bibliography (self explanatory) and a sequence of short paragraphs explaining the reason for inclusion of each bibliographic item. Certain key terms are highlighted in bold & colour for the convenience of the reader.

1. SITES & SHEAVES

The original reference for the notion of a sheaf, in this sense, is [AGV72]. The book [MLM92] is very readable and an excellent reference as well. The mammoth resource [de 17] is excellent on this topic as it is on many others we will encounter. For the category theory that we assume, the resource [Lan98] is the definitive reference.

2. THE NISNEVICH TOPOLOGY

Our reference for the algebraic geometry is [Har77] or [Vak15]. For the notion of an étale map, one may consult [de 16] or (the original) EGA IV: [Gro66]. The book [Mil80] is excellent, and in the case of varieties (which is what we really care about anyway), the notes [Mil98] are recommended.

The Nisnevich topology is due to [Nis89].

3. MODEL CATEGORIES

For generalities on model categories and their localizations, one should consider [Hir03] and [Hov99] for reference, for motivation and understanding, [BK72] and the informative [Sul74]. Some technical details not handled elsewhere are in [Bar10].

4. UNSTABLE THEORY

The original source for local homotopy is [Jar87]. There is also a letter of Joyal [Joy83], but it is hard to come by. Nowadays, one consults [JSS15].

For the A¹ homotopy theory in particular, one must consult [MV99]. Alternate constructions are given by [Bla01], [Isa05]; for the latter one should also consult [DHI04] and [Dug01].

5. STABLE THEORY

A gentle introduction to stable A¹ homotopy may be found in [VRO07]. A good account of motivic spectra and symmetric spectra can be found in [Jar00b], [Jar00a]; and another fine account is in [Hov01].
REFERENCES


