Thanks for the response to all my previous comments. Still there are several minor mistakes in the current version.

- 1. Please check if is reasonable to use the term 'multi-community detection'. Originally, it should be 'multiresolution community detection'. I don't think this abbreviation delivers the same meaning.
- 2. Please change Eqs. 6 and 7 in a more formal way. Shouldn't there be parentheses if they are conditional formulas?
- 3. Please check Eq. 9, make sure it is in the right form. If I remember correctly, the current form is not correct. Should be  $g(a) \in P$ , isn't it?