Nirag,  
   I made a pass through your paper.   Looks good - but I have to acknowledge some of it went over my head.   
   Here are a few comments:  
  
165   switching between active and inactive states and binding are probably faster than other reactions, but if they aren’t what happens?  

As long as t >> 1/(binding rate). Make clear in abstract, 2 ingredients:

175  N=150   how did you select this number?  what if you picked a larger number?  
  
229   Could receptors be different in adaptation?  Remember they are only 15% identical.  Also odorants vary enormously in physicochemical properties.    Could T, h(t) and f vary?  

Change tau for ORN-dependence (SI). Little known about pathway, so keep agnostic

236   assume receptors bind one odorant at a time:     The latest Nature paper suggests a tetrameric structure which would have more than one identical site, and may well have more than one kind of site

Know its tetramer, cooperativity could exist – this would change input nonlinearity, but adaptation is downstream. Could keep really *any* NL in front. As long as gain ~  
  
Minor  
41   ultimately decoded and transformed downstream into behavioral response?  
60   ref 30 is the new Orco structure paper.  Did you want to refer to the recent discovery of invariances?    
113  not sure about “nuisance background”  
555  typo ephaptic  
  
I told Thierry:  If you need any help selecting Editorial Board members to handle this let me know.   
  
Best, John