Discrepancy report on a paper "A new proof of Euclid's algorithm"

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author	**opponents**
An algorithmic formula H is presented, that is a halting formula of Euclid's algorithm. The formula H is valid in these data structures in which (all) computations of Euclid's algorithm are finite, and is falsifiable in the structures such that for some data the algorithm diverges.	The oppponents assure that: **Stmt1**) One can construct the halting formula ψ for the Euclid's algorithm in the language of first-order arithmetic. A formula is sketched, not presented. There is no proof that formula ψ is a halting formula.
Thm. The formula H is a theorem of algorithmic theory of natural numbers Th_3. A proof is presented.	**Stmt2**) The formula ψ is a theorem of first-order arithmetic PA. No proof of the statement is given.
Thm. The formula H is not a theorem of elementary arithmetic of natural numbers (Peano arithmetic) Th_0. A proof is presented.	**Stmt3**) "For people living in the non-standard model, all computations of Euclids algorithm are finite (of course in the sense of this non-standard model)." No explanation is given.

Questions.

1. It seems that the opponents overlooked the example of infinite computation from the Appendix A? Am I right?

2. It seems that the opponents are unaware of the definition of halting formula. Am I right?

3. Or, perhaps there are publications containing the term "halting formula" defined in a way different that E. Engeler did? I humbly confess, I do not know publications where the term halting formula was given a meaning different that this known from our papers.

4. Did the opponents read the submitted paper? I doubt.

5. Statement Stmt3 seems to witness that the opponents accept various semantics of **while** statements that depend on data structure. Is it so?

6. The reviewer asserts that " *algorithmic logic requires standard time computations.*" We are not aware of this feature of AL. Would someone explain it to me? Where the concept of time appears in our work? I am puzzled.

Comments.

- Till today no one pointed an error in my proofs.
  The opponents say "*you are wrong because the statemts Stmt1 and Stmt2 are true.*"

- I can not analyze the statements announced by the opponents because no proofs nor references to proofs are given. However, I am showing some paradoxical consequences of accepting the conjunction of statements Stmt1 and Stmt2. E.g. a) from the statements offered by opponents one could deduce that all computations of Euclid's algorithm in a non-standard model are finite, b) any elements of a non-standard model were reachable (i.e. standard ones), etc.

- I am not able to explain to programmers how to apply the Stmt3 in their profession. In my opinion programmers do not live in non-standard models. However, they can be confronted with such models in their practice. Cf. Examples in the appendix A.