

Dancing with Plagiarism

There is nothing more unpleasant than having to defend your 40 year old results from junior mathematicians. I can't blame them they don't know any better, they're hungry for new results. The main blame should go to the seniors advising them, who should be aware of history. Now let me comment on several examples (in future I might have to extend this list):

For example [S] is a talk on [A2], where the speaker is ignoring the author of the theorem he is lecturing on :). Another example is the recent youtube video [H], where the speaker is mostly rehashing 30 year-old known results. For example, the theorem which the speaker named Theorem (H) is basically a known result. The first example of properly imbedded smooth disks $D, D' \subset B^4$ bounding the same knot K , such that (B^4, D) and (B^4, D') are diffeomorphic but not isotopic to each other is from [A3] (and revisited in [A6]). K is the same mysterious knot of (Figure 7 of [A3]), which keeps appearing in many different contexts past 30 years in my research. And yes, the fundamental group of the complement of D is \mathbb{Z} , and showing that the resulting associated manifold is cork uses the adjunction inequality for Stein manifolds, which was first done in [AM1] (later by Mrowka and Rollin).

Furthermore, the technique distinguishing knot concordances by taking their branched covers and applying the Donaldson's famous theorem is not new, it is least 30 years old (see Exercise 11.4 of [A1]) (*Historical note: To understand Donaldson's theorem, circa 1980 a conference was held in UCSB, Blaine Lawson lecturing. A popular questions posed there was 'whether Donaldson's theorem could be helpful producing algebraically slice but not slice knots? Two such examples emerged in that conference, one by Casson (some pretzel knot), the other by myself: the 0-Whitehead double of Trefoil knot $Wh(K)$ (both are unpublished). My proof was the branched covering technique I mentioned above.*)

Another example is, what people call "RBG" links these days [MP]. They allow you to construct two diffeomorphic 4-manifolds each of which is obtained by attaching 2-handle to B^4 along distinct knots, one is slice the other is not. In fact this technique is not new at all, it is over 40 years old ([A4], [A5]), which was my first attempt to construct exotic 4-manifold pairs (which I had finally accomplished in [A2]). By the way this is the only technique I know how to produce such examples (Exercise: In Figure 7 of [A5] locate R, B, and G) . I don't know why people ignore my recent '4-Manifolds' book, where I collected all such results.

Properly citing and crediting previous results is an essential part of any paper; any omissions in this area can hurt credibility of your paper. Here is an example from [KMT], where its abstract says “This leads to an example of a pair of exotically knotted RP^2 's embedded in a closed 4-manifold whose complements are diffeomorphic, making it the first example of a non-orientable surface with this property”. Clearly this result is known for 15 years [A7].

Also the first example of an exotic pair of Mazur manifolds (also Stein) appeared in [AY], not in [HMP] as stated in <https://arxiv.org/pdf/2510.10809>.

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