

A new graph coloring algorithm is presented on my wordpress blog
"<https://fourcoloralgorithm.blog>" .

It is a very simple and really nice generalized alternating chain algorithm.

It's much more general and much better than Kempe chains for four coloring planar graphs. I don't think it will run into the same problems as Kempe Chains.

I'm presently going to apply it only to four color planar graphs though it has much wider applicability.

I think it can eventually be applied to real world practical graph coloring problems.

I am writing a program in boost C++ to implement the algorithm .

The first stage is to write a program which takes simple instructions fed into the program which are executed one by one.

The example "4 Color Alg" on my Wordpress blog is done in this way.

The plan is first do this for a large number of small planar graphs and publish the results on the web..

Then subroutines are written to automate these instructions.

Eventually the goal is that this will be done entirely programmatically.

Then we can test the program on hundreds of thousand or millions of examples.

Then prove theorems.

Installing the required software on computer is a little complicated and might be a challenge for high schoolers.

I think this will be an excellent opportunity to make a contribution for combinatorialists of any age.