
Installation Instructions for the ColorJones Package

JESSE S. F. LEVITT

I. INTRODUCTION

These are the installation instructions for the ColoredJones Mathematica Package, described in <http://arxiv.org/abs/1804.07910>. It has been successfully installed on both macOS High Sierra and Windows 10 machines.

II. MACOS INSTALLATION

1. This code is a Mathematica package, so you must start by installing Mathematica. Most institutions have access keys for the software and we recommend you to your institutions software page for installation and setup instructions.
2. Once Mathematica is running the NCAAlgebra package must be installed. The package code and installation instructions are available at <http://github.com/NCAAlgebra/NC>.
3. It is optional, but recommended to install the KnotTheory package. In particular, if you wish to refer to knots by their Rolfsen, or Hoste-Thistlethwaite table numbers rather than by their braid word, they are pulled from this package. The package code and installation instructions are available at <http://katlas.org/wiki/Setup>.
4. Having installed Mathematica, NCAAlgebra, (and optionally KnotTheory) we can now install the ColorJones package. Please first download the package from <http://github.com/jsflevitt/color-jones-from-walks> by clicking "clone or download" and selecting "Download Zip".
5. Extract the directory (it will usually auto-extract) and then place it in your desired directory, which we will refer to as <ColorJones>.
6. We must now determine if your system has a C compiler. Opening Terminal from within the Utilities folder in Applications, type: *which gcc*. If this returns a directory path or otherwise does not throw an error you have a C compiler.
7. Optional: If you did not have a C compiler we recommend installing one by installing XCode for free through the Apple App Store.
8. Now open Mathematica and within the "File" menu select "Install..." then
 - Under "Type of item to install:" select "Package".
 - Under "Source:" select "From File ...", navigate to the directory <ColorJones>
If you had a C compiler select "ColorJones.wl"
If you did not have a C compiler select "ColorJonesNoCCCode.wl"
 - Under "Install name:" type in "ColorJones" and click "OK".
9. At the beginning of any Mathematica notebook you may now type in: **Quiet[<<ColorJones`]** to use the ColorJones package, noting that the apostrophe must slant from top left to bottom right.

III. WINDOWS 10 INSTALLATION

1. This code is a Mathematica package, so you must start by installing Mathematica. Most institutions have access keys for the software and we recommend you to your institutions software page for installation and setup instructions.
2. Once Mathematica is running the NCAgebra package must be installed. The package code and installation instructions are available at <http://github.com/NCAgebra/NC>.
3. It is optional, but recommended to install the KnotTheory package. In particular, if you wish to refer to knots by their Rolfsen, or Hoste-Thistlethwaite table numbers rather than by their braid word, they are pulled from this package. The package code and installation instructions are available at <http://katlas.org/wiki/Setup>.
4. Having installed Mathematica, NCAgebra, (and optionally KnotTheory) we can now install the ColorJones package. Please first download the package from <http://github.com/jsflevitt/color-jones-from-walks> by clicking "clone or download" and selecting "Download Zip".
5. Extract the directory (it will usually auto-extract) and then place it in your desired directory, which we will refer to as <ColorJones>.
6. We must now determine if your system has a C compiler.
7. Now open Mathematica and within the "File" menu select "Install..." then
 - Under "Type of item to install:" select "Package".
 - Under "Source:" select "From File ...", navigate to the directory <ColorJones>
If you had a C compiler select "ColorJones.wl"
If you did not have a C compiler select "ColorJonesNoCCCode.wl"
 - Under "Install name:" type in "ColorJones" and click "OK".
8. At the beginning of any Mathematica notebook you may now type in: **Quiet[<<ColorJones`]** to use the ColorJones package, noting that the apostrophe must slant from top left to bottom right.

IV. LINUX INSTALLATION

To be added pending test cases.