

# WuRittSolva User Guide

## Standard Application Package for Wu-Ritt Process

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## About WuRittSolva

WuRittSolva is a Mathematica standard application package developed for Wu-Ritt process, and now I have realized the characteristic set computaion,polynomial equations system solving etc.; For further development, I need to compliment it with more useful tools for special purposes.

It contains several .m file in general, and the init.m is for initializing the working enviroment while the others realize the concrete functions directly or indirectly. The other ones are WuRittSolva.m, Master.m .

The original version of the algorithm is deriveted from wsolve written by Doctor Wang Dingkang, MMRC,ISS,CAS. For the sake of convenience, I take the concrete steps of user-defined functions from wsolve,It works well.

## How WuRittSolva Works

When to use this package, it is convenient to copy it to Autoload directory under the addons dirctory of installation directory, then start the *Mathematica* Frontend and try use it. Another way is to copy it to StandardPackages directory, then call functions by using command `Need[WuRittSolva`*]` or `<<WuRittSolva`*;` Both ways are reasonable.

## Some Comments on Functions

Some functions in WuRittSolva are not described detailly, but they are useful. It is still possible to acquire the usage from the status bar of each palatte of WuRittSolva Tools. Preknowledge on *Mathematica* is necessary.

## Relevant Resources

Some resources are available for developing the WuRittSolva , and these coresponding notebooks are listed below:

- [1]. Demonstration of WuRittSolva.nb
- [2]. Details of WuRittSolva.nb
- [3]. Demonstration of WuRittSolva in Elementary Geometry.nb
- [4]. A Collection of Testing Problems.nb
- [5]. WuRittSolva for Concrete Geometric Configurations in Elementary Geometry.nb
- [6]. WuRittSolva User Manual.nb