

## Mathematics &gt; Commutative Algebra

# Arithmetic-arboreal residue structures induced by Prufer extensions : An axiomatic approach

Serban A. Basarab

(Submitted on 3 Nov 2010)

We present an axiomatic framework for the residue structures induced by Prufer extensions with a stress upon the intimate connection between their arithmetic and arboreal theoretic properties. The main result of the paper provides an adjunction relationship between two naturally defined functors relating Prufer extensions and superrigid directed commutative regular quasi-semirings.

Comments: 56 pages

Subjects: **Commutative Algebra (math.AC)**; Logic (math.LO)

MSC classes: Primary 13F05, Secondary 13A15, 13A18, 06F20, 05C05

Cite as: [arXiv:1011.0855v1](#) [math.AC]

## Submission history

From: Serban Basarab A. [[view email](#)]

[v1] Wed, 3 Nov 2010 11:59:13 GMT (54kb)

*[Which authors of this paper are endorsers?](#)*

## Download:

- [PDF](#)
- [PostScript](#)
- [Other formats](#)

Current browse context:

**math.AC**

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1011](#)

Change to browse by:

[math](#)

[math.LO](#)

## References & Citations

- [NASA ADS](#)

Bookmark([what is this?](#))



Link back to: [arXiv](#), [form interface](#), [contact](#).