

1113-12-30

Ian H Greenhoe* (ihg@ihgreenman.com), 521 La Plaza Ave S, St Petersburg, FL 33707. "*Why the discrete Z-transform is dead:*" *the debut exploration of a new field formed using discrete convolution over infinite sequences.* Preliminary report.

The debut exploration of a new field formed using discrete convolution over infinite sequences of elements from any specific field, presented by the discoverer.

This new field forms an algebra which can take as any element any field structure, including itself. (A similar ring structure can also be formed.)

This talk will include a basic outline of the proof of this field; requirements to construct it; implications; and several examples, including how to automatically generate Infinite Impulse Response digital filters with Finite Impulse Response filter level control. (Received July 15, 2015)