

Summary of Comments on kearnes-kiss-markup.pdf

Page: 2

☰ Author: Subject: Callout Date: 18/06/2008 5:23:03 PM

tame congruence theory?

☰ Author: Subject: Callout Date: 20/06/2008 2:26:05 PM

are there analogs of Theorems 9.14 and 9.15 from Hobby-McKenzie that could be proved?

quasi-identity and quasi-affine are hyphenated, but quasiorder and quasivariety aren't.


Author: Subject: Callout Date: 14/04/2008 1:36:00 PM
remove "by"


Author: Subject: Callout Date: 14/04/2008 1:36:34 PM
has this notation been defined?


Author: Subject: Callout Date: 14/04/2008 1:46:31 PM
2.14

Author: Subject: Callout Date: 14/04/2008 2:03:55 PM
since $B(f)$ is a finite boolean algebra, a lattice filter is the same thing as a principal filter.

the presentation of the proof of this theorem could be considerably shortened, since much of the proof is elementary and could be left to the reader to work out.

 Author: Subject: Callout Date: 14/04/2008 3:36:00 PM
w_i, not t_i


 Author: Subject: Line Date: 14/04/2008 3:36:06 PM


 Author: Subject: Callout Date: 14/04/2008 3:36:36 PM
... of the f_i ...

you just use that $w_i(p,q,r)$ for this, not that the quasi-identity holds in L.

Author: Subject: Callout Date: 14/04/2008 3:44:11 PM
do we need to assume that for these w_i that $w_i(p,q,r) \leq t$?

Author: Subject: Callout Date: 14/04/2008 3:57:57 PM
perhaps some mention of the origin of these lattices words should be made here. They appear in the work of Czedli, as well as in Hobby-McKenzie, and for all I know in other work.


 Author: Subject: Callout Date: 14/04/2008 5:47:09 PM
should be A(M)


 Author: Subject: Line Date: 14/04/2008 5:47:12 PM

to be consistent, use "rectangularity" instead of "rectangulation" here.



Author: Subject: Callout Date: 15/04/2008 2:06:11 PM

It doesn't follow that if (p,q) is in τ_n then this matrix is in $M(S,T)$ and so one can't conclude that (p,q) is in τ_{n+1} from this. I think that you need to argue that the generators of τ_n all lie in τ_{n+1} instead.


 Author: Subject: Callout Date: 17/04/2008 12:03:22 PM
this should be something other than n, the arity of f.


 Author: Subject: Line Date: 17/04/2008 12:03:41 PM


 Author: Subject: Line Date: 17/04/2008 12:04:16 PM


 Author: Subject: Callout Date: 17/04/2008 12:04:07 PM



 Author: Subject: Line Date: 17/04/2008 12:05:09 PM


 Author: Subject: Line Date: 17/04/2008 12:04:35 PM


 Author: Subject: Callout Date: 17/04/2008 12:04:29 PM



 Author: Subject: Line Date: 17/04/2008 12:04:41 PM

 Author: Subject: Callout Date: 17/04/2008 12:05:48 PM
extra ")" here.

 Author: Subject: Line Date: 17/04/2008 12:05:51 PM

 Author: Subject: Callout Date: 17/04/2008 12:07:59 PM
these variable patterns don't match those in 3.19

 Author: Subject: Callout Date: 17/04/2008 12:07:20 PM
n, not m.

 Author: Subject: Line Date: 17/04/2008 12:08:13 PM

it is clear that N is supposed to be $\{1, 2, \dots, n\}$, but it would be helpful to mention this, rather than forcing the reader to look ahead to figure this out.

you might want to ensure that this figure doesn't appear all by itself on a page in the final version.

Author: Subject: Callout Date: 17/04/2008 3:43:55 PM
"Is" not "If".

Author: Subject: Callout Date: 17/04/2008 3:49:33 PM
lattice L for which ...

Author: Subject: Callout Date: 17/04/2008 3:52:50 PM
third

Author: Subject: Line Date: 17/04/2008 3:52:58 PM

Author: Subject: Callout Date: 18/04/2008 4:01:18 PM
consider labelling this lattice with alpha, beta, gamma, delta. my first attempt didn't work.

Author: Subject: Callout Date: 20/06/2008 11:10:52 AM
in most, or maybe all other instances, the \approx symbol is used instead of $=$ in quasi-identities.


Author: Subject: Callout Date: 18/04/2008 5:04:48 PM

I don't think that you get simple lattices in all cases. for example, when $G = \{a,b,c,d\}$ and a is adjacent to all other elements, and there are no other edges, then $L[G]$ has M_3 as a quotient (I think).

-
- ☰ Author: Subject: Callout Date: 18/04/2008 5:05:16 PM
all we know at this point is that a is adjacent to all other vertices. this doesn't make G complete.
-
- ☰ Author: Subject: Callout Date: 18/04/2008 4:57:28 PM
remove "of"
-
- ☰ Author: Subject: Callout Date: 18/04/2008 5:05:46 PM
this conclusion is still valid, of course.

how does this definition differ from mckenzie's original definition?

 Author: Subject: Line Date: 27/05/2008 9:58:57 AM

 Author: Subject: Callout Date: 27/05/2008 9:58:36 AM
extra)

-
- ☰ Author: Subject: Callout Date: 27/05/2008 10:15:38 AM
lower case "i"

 - ☰ Author: Subject: Callout Date: 27/05/2008 10:15:55 AM
remove "i"


 - ☰ Author: Subject: Callout Date: 27/05/2008 10:16:09 AM
"i" not "r"

 - ☰ Author: Subject: Callout Date: 27/05/2008 10:18:52 AM
"b"

 - ☰ Author: Subject: Callout Date: 27/05/2008 10:19:05 AM
and clearly, (5) implies (2).

 Author: Subject: Callout Date: 27/05/2008 2:55:53 PM

slight mismatch in presentation here and on the next page.

 Author: Subject: Line Date: 27/05/2008 2:56:05 PM

Author: Subject: Callout Date: 27/05/2008 3:22:37 PM

isn't τ_2 a transversal for E_1 ? τ_1 isn't a transversal for E_2 . E_2 should be (x,y) and (u,v)

Author: Subject: Callout Date: 27/05/2008 3:09:18 PM

this needs to be fixed too and references to h in the proof need to be adjusted, depending on how E_1 and E_2 are defined.

strictly speaking, p^*q is not a member of G , but is rather a γ class.

Author: Subject: Callout Date: 27/05/2008 3:28:02 PM





consider replacing "observe" with "prove", since a fair amount of work is needed to establish this connection.

explain why the term "difference" is used for this kind of term.

Author: Subject: Callout Date: 29/05/2008 2:08:38 PM
remove

Author: Subject: Callout Date: 29/05/2008 2:10:40 PM
le

Author: Subject: Callout Date: 29/05/2008 2:13:54 PM
z, not y

	Author: proves	Subject: Callout	Date: 29/05/2008 2:08:44 PM
	Author: intervals	Subject: Callout	Date: 29/05/2008 2:22:21 PM
	Author:	Subject: Line	Date: 29/05/2008 2:22:27 PM
	Author: lemma	Subject: Callout	Date: 29/05/2008 2:30:34 PM

Author: Subject: Callout Date: 29/05/2008 4:03:03 PM

this is pretty much immediate, no need to refer to earlier claims.

Author: Subject: Callout Date: 29/05/2008 4:15:14 PM
is a ...

Author: Subject: Callout Date: 29/05/2008 4:22:39 PM
why distinguish this as a separate claim? this is what is supposed to be proved in the theorem.


Author: Subject: Callout Date: 27/05/2008 5:10:07 PM
develop


Author: Subject: Callout Date: 29/05/2008 4:29:34 PM
we show that it is possible to ...

Author: Subject: Callout Date: 20/06/2008 11:36:56 AM


it isn't obvious why there are any prime congruences above θ (unless i've missed something). so, up front, θ could be the intersection of the empty set. (which is this equal to 1_A). in any case, the construction of π shows that there must be prime congruences $\geq \theta$. you might want to address this issue in some manner, since others may have the same problem at this point. you could introduce a lemma that shows that if σ avoids a congruence then it can be extended to one that is prime and that is still avoided by σ . this is used in the next theorem as well.


it would be helpful to point the reader to the definition of this. it has been many pages since we last saw this.


 Author: Subject: Callout Date: 12/06/2008 11:29:43 AM
LS

 Author: Subject: Line Date: 12/06/2008 11:29:56 AM

 Author: Subject: Line Date: 12/06/2008 11:29:49 AM

 Author: Subject: Callout Date: 12/06/2008 11:31:30 AM
7.4

 Author: Subject: Callout Date: 12/06/2008 11:42:13 AM
you could use P/Q/R here.

 Author: Subject: Line Date: 12/06/2008 11:42:17 AM

☰ Author: Subject: Callout Date: 12/06/2008 1:21:58 PM
is it the case that up until this point, the fact that the intervals are solvability obstructions has not been used? if so, it might be worth mentioning this.

☰ Author: Subject: Callout Date: 12/06/2008 1:20:59 PM
nu is any congruence?

☰ Author: Subject: Callout Date: 12/06/2008 1:16:05 PM
adjust the spacing here.

at first i thought that this was a typo. consider using the \prime symbol, or some other symbol.

what assumptions are you making about V in this theorem? that is has a hobby-mckenzie term?

Author: Subject: Callout Date: 12/06/2008 4:35:19 PM
a, not an


Author: Subject: Callout Date: 12/06/2008 4:36:12 PM
Con(V)


consider pointing out the similarity of this theorem and theorem 9.11 from hobby-mckenzie.

Author: Subject: Callout Date: 20/06/2008 2:04:06 PM

is this similar to any of the configurations used in chapter 10 of Hobby-McKenzie? If so, please indicate which one.

consider remarking that this generalizes Theorem 10.4 of Hobby-McKenzie.

 Author: Subject: Callout Date: 20/06/2008 1:02:06 PM
use a different symbol here.

 Author: Subject: Line Date: 20/06/2008 1:02:10 PM

Author: Subject: Callout Date: 12/06/2008 10:46:34 PM
missing accent.

Author: Subject: Callout Date: 12/06/2008 10:46:54 PM
schmidt

