To Do - Research

1) Email Hoffmann - Res. MAP problem ✓
   - 30 mins

2) Email Hoffmann - Exit verification ? ✓
   - 15 mins

3) Look at log MAP encodery chain -
   - e.g. 100 epoch
     - In middle, all claims resolve to the middle layer should be properly clean.
     - 2 hrs

4) Try longer batch size problem - 5 batch size -
   - e.g. $MAP_{10} = 1, 3, 7, 15$
   - $2^{i-1}$
   - $1 \leq i \leq \lceil \log_2 n \rceil$
   - $MAP_{20} \rightarrow 1, 3, 7, 15, 31$
     - #1, #2, #3, #4, #5
   - Q. Still small batch size -
     - "log" effect should be most clean -
     - Also, by verifying claims about propagation in paper.

5) Ping Hoffmann about MAP problem.
   (See #1)
#6) Understand MAP - (ogn backdoor prof. (dech supporting lemma) I also empirically)

#7) Also, consider symmetrical one of MAP => exponential backdoor because of "implicit" Pigeon Hole (PH).

Q. Can you add other analogies that mimic Pigeon Hole (PH)?

If feasible, may provide new way to think of external verification. (Had some visual I"dyn. prog. like")
#8) check comp. on spatial control of biological invasions.

p. 263 - suggest an IP approach over a DP approach because of dimensionality - by reformulating the ODE transition system.

#9) Explore MAP.cemf code by

Hoffman - email 06/15/04

Approach to have all the details we need - I hope to have all the details we need.

Move - \( L_0 - L_1 \) @ \( t=1 \) - var 21
Move - \( L_1^2 - L_1^3 \) @ \( t=3 \) - var 103
Move - \( L_1^6 - L_1^7 \) @ \( t=7 \) - var 103
Move - \( L_1^{14} - L_1^{15} \) @ \( t=15 \) - var .979

Won't incorporate because: 21, -103, -481, -979

2 out of 16 cases checked with "compact" function & \( L_0 - L_1^6 \) @ \( t=0 \)

Thoughts need to reconsider numbers in previous paper. Time index may be shifted by one.
Note: Experiments with UP help on
lim.cs.cornell.edu
D. Selman [SAT1 planning] Hoffman
MAR-2conf/map-lineanized
Extreme care

Note: Issue with earlier exp may have been
to use of state-based encodings.

MAR-2conf was action based encoding
- i.e. can chain explicit V005 encoding
- one action at a time
- e.g. move L1 to L2 V move L3 to L4

etc. (there are a lot of them)
may be much more usable than state-based encodings?

HMM. Would predict again UP-intractability...

#10) Understand extended reach in proof
for PH - once & for all.

(=) can it be captured in the planning?

In practice?

How does it really come?

It doesn't. :-)

If within inductive steps,
& go leading to a conflict term.

Assume PH mapping
\{s_1 \ldots n\} \rightarrow \{s_1 \ldots n-1\}

\{s_1 \ldots n-1\} \rightarrow \{s_1 \ldots n-2\} [with new pop. elements]
The set \( \{1 \ldots n-2\} \) is now \( \{1 \ldots n-3\} \)

e.g. Until you get to:
\[
\{1,2\} \rightarrow \{1\}
\]
but inconsistent

Make a bit more concrete.

\( \text{Con} \Rightarrow \text{show claims allow} \)

In a poly-time reduction with the new beliefs.
I still need details.

[Continued in separate research note]