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## Jacksonville 2018 LEWG Summary

This paper is a summary of the activities of the Library Evolution Working Group during the recent WG21 meeting in Jacksonville.

In brief: we discussed 40 papers during the meeting, and 6 more informally on Saturday afternoon after plenary. There are approximately 25 papers that have been sent to LEWG that have not been discussed - this is roughly the same volume as what remained after the Albuquerque meeting in late 2017. I am hoping to increase overall inter-meeting throughput on proposals by improving use of the reflectors - please subscribe to the isocpp-lib-ext reflector for more information.

### Acknowledgements

Thank you to Jonathan Coe for his many hours of service as note-taker during the meeting. Additional thanks to Bob Steagall and Nico Weber for that service when Jonathan was pulled out.

Additional thanks to everyone that participated in the discussions during the week.

### Approved LEWG Policy Changes

- Allow conditional noexcept for wrapper types ([P0884](#))

### Papers Forwarded to LWG for the Working Draft

- Standard Library Concepts ([P0898](#))
- Heterogenous lookup for unordered containers ([P0919](#))
- variant and optional should forward triviality ([P0602](#))
- reference\_wrapper for incomplete types and assorted removals ([P0357](#))
- Define basic\_string\_view(nullptr) ([P0903](#))
- char8\_t - A type for UTF-8 characters and strings ([P0482](#))
- Symmetry for spaceship ([P0905](#))
- Introducing <smart\_ptr> header ([P0942](#))
- An identity metafunction (type\_identity) ([P0887](#))
- polymorphic\_allocator as a vocabulary type ([P0339](#))
- function\_ref ([P0792](#))

## Papers Forwarded to LWG for the Reflection TS

- Revisit the core reflection paper ([P0194](#))
- Static reflection of functions ([P0670](#))

## Papers Forwarded to LWG for the Coroutines TS

- Add symmetric coroutine control transfer ([P0913](#))

## Discussed but not Approved nor Forwarded

- C++ Stability, Velocity, and Deployment Plans ([P0684](#))
- Standard Library Compatibility Promises ([P0921](#))
- LEWG wishlist for EWG ([P0922](#))
- Merging the Ranges TS ([P0896](#))
- Range complexity requirements (D0979R0)
- Executors ([P0443](#), [P0761](#))
- Design and customization for span and mdspan (D0122, [P0546](#), [P0856](#), [P0900](#))
- Hazard pointers + RCU ([P0566](#))
- 2D Graphics ([P0267](#))
- ext formatting ([P0645](#))
- Containers operations that handle failure w/o exceptions ([P0132](#))
- Naming and design for simd types ([P0916](#))
- Product-type access ([P0327](#))
- Move-only iterators ([P0902](#))
- Math constants ([P0631](#))
- Stack traces ([P0881](#))
- `wide_int<>` ([P0539](#))
- Interpolation ([P0811](#))

## Discussed and Informally Approved after Plenary

I expect to mention these papers in opening Plenary at the next meeting, and open brief discussion during LEWG early in the week.

- Tightening the constraints on `std::function` ([P0932](#))
- Interpolation (D0811R2)
- Utility functions to implement uses-allocator construction ([P0591](#))
- Allocator-aware basic stringbuf ([P0407](#))
- Unwrapping reference\_wrapper ([P0318](#))

## Discussed Informally after Plenary

- Improving atomic\_flag (D0995)



