

C++ Club Meeting Notes

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- ▶ Bartek's Coding Blog: Five Awesome C++ Papers for San Diego
 - ▶ `constexpr std::string` and `constexpr std::vector`
 - ▶ Extended structured bindings
 - ▶ Pattern matching
 - ▶ Text formatting
 - ▶ A concurrent associative data structure with an unsynchronised view, slides

- ▶ JeanHeyd Meneide: Simple, Easy Papers
 - ▶ Nested inline namespaces
 - ▶ nodiscard should have a reason
 - ▶ void main – *Hmmm... don't think so*
 - ▶ Byteswapping for fun&&nuf
 - ▶ offsetof for the Modern Era
 - ▶ namespace std { namespace fs = filesystem; } – *Meh*
 - ▶ Literal Suffixes for size_t and ptrdiff_t
- ▶ Reddit

- ▶ JeanHeyd Meneide: Optional Choices to Make
 - ▶ Monadic operations for `std::optional`
 - ▶ A simple, practical optional reference for C++
 - ▶ “The good news is that this paper lets the C++ Committee continue to wage the holy war about how comparison and assignment for such a type should work while providing a way forward for not only `std::optional<T&>`, but `variant<T&, ...>` and `std::expected<T&>`.”
 - ▶ Jonathan Boccara: Why Optional References Didn't Make It In C++17
 - ▶ Reddit
- ▶ Reddit

- ▶ JeanHeyd Meneide: Paper Review II

- ▶ Feature Presentation
- ▶ Forward from `initializer_list`
- ▶ A view of 0 or 1 elements: `view::maybe`
- ▶ Proposing unless
- ▶ Immediate functions

- ▶ Reddit

The simplest papers are often the worst for bikeshedding. – Niall Douglas

- ▶ `Implicit constexpr`
- ▶ `Package Specification`, `Notes on C++ Package Management`, `Package Ecosystem Plan`
- ▶ `Canonical Project Structure`
 - ▶ “If you have to disregard every rule and recommendation in these guidelines but one, for example, because you are working on an existing library, then insist on this: **public header inclusions must use the library name as a directory prefix.**”
- ▶ `find_backward`
- ▶ `flat_map` and `flat_set`
- ▶ `char8_t`: A type for UTF-8 characters and strings

